

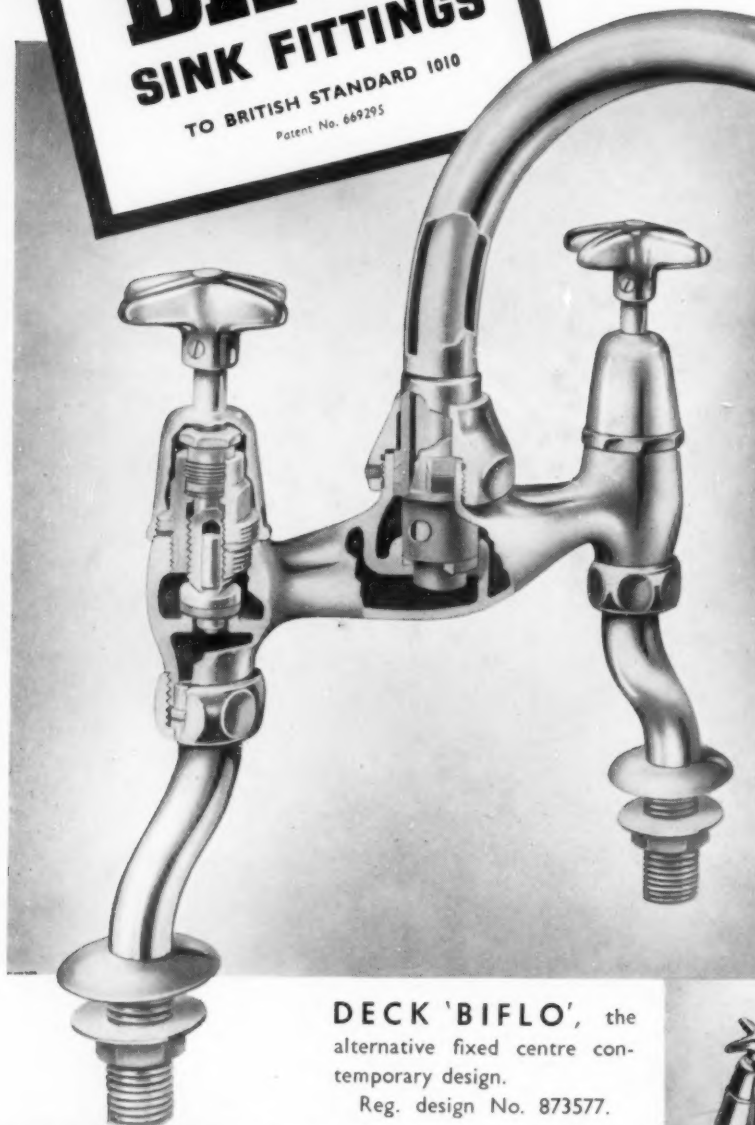
# THE ARCHITECT & BUILDING NEWS

7 JUNE 1956 · VOL 209 · NO. 23 · ONE SHILLING WEEKLY

- GATEWAY HOUSE, NEAR ST. PAUL'S
- OFFICE BLOCK, WREXHAM
- CURRENT MARKET PRICES  
AND MEASURED RATES

PUBLISHED IN LONDON SINCE 1854

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Paper Makers



Illustrated in this issue

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## Painting Building Surfaces?

The increasing use of colour on externals of modern buildings brings its own problems. Certain surfaces—new concrete, cement renderings and asbestos cement—often require painting, but their alkalinity prevents the use of conventional coatings. For this work, Tretolin Paint is the most reliable choice—it is applied direct to alkaline surfaces and gives years of good-looking service even in the most polluted atmospheres. Tretolin is available in a modern colour range based upon the new B.S.2660/1955 colour series. Can we send our descriptive folder B/T?

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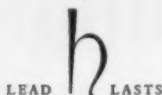
Many permissible minimum weights greatly reduced

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**The new revisions  
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reduce the minimum weights  
for flushing and warning pipes  
and represent  
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**32%**

Tables incorporating the new standards have been prepared and are available in a revised edition of "CONCISE INFORMATION ON LEAD PIPE" free on request.



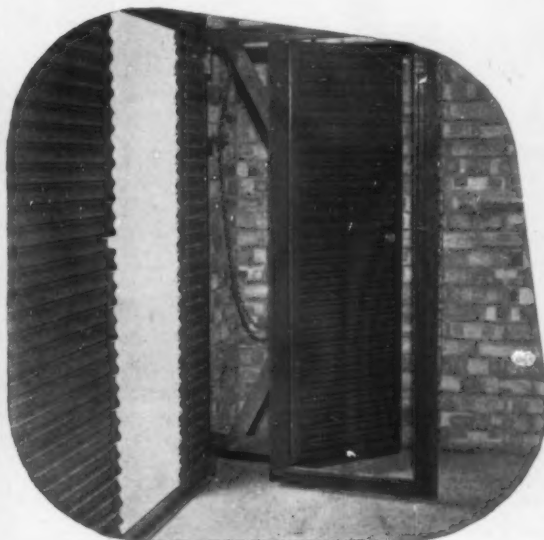
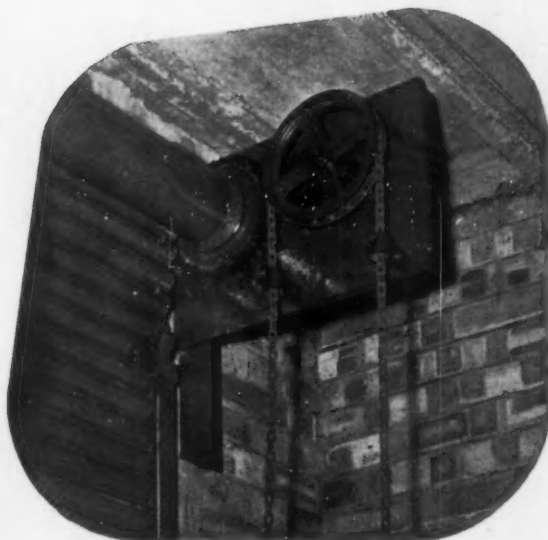
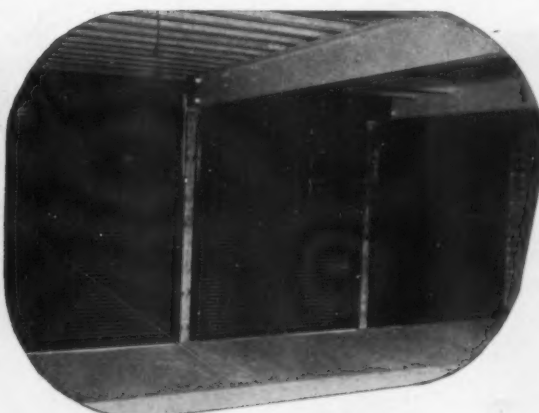
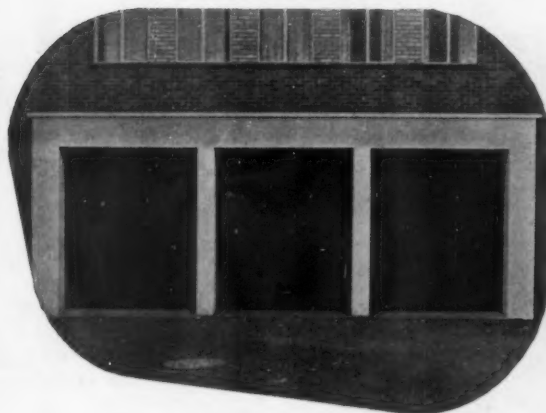
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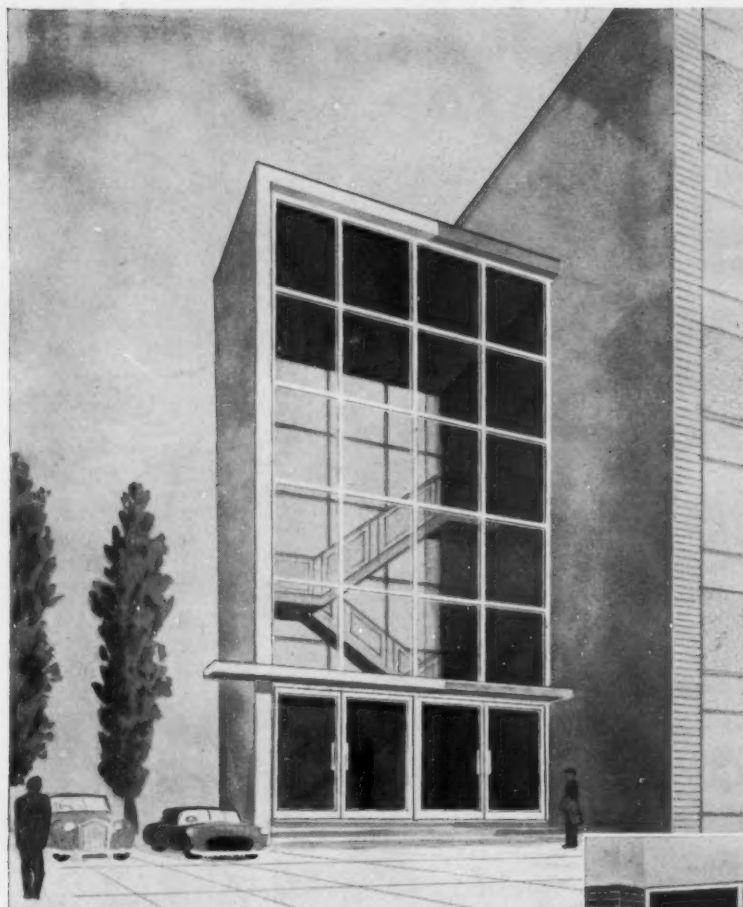
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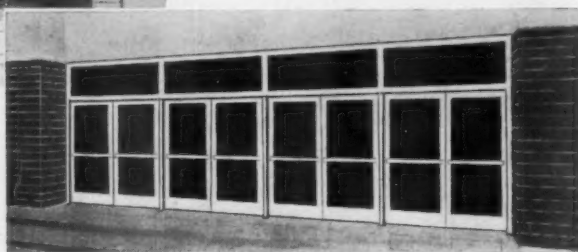
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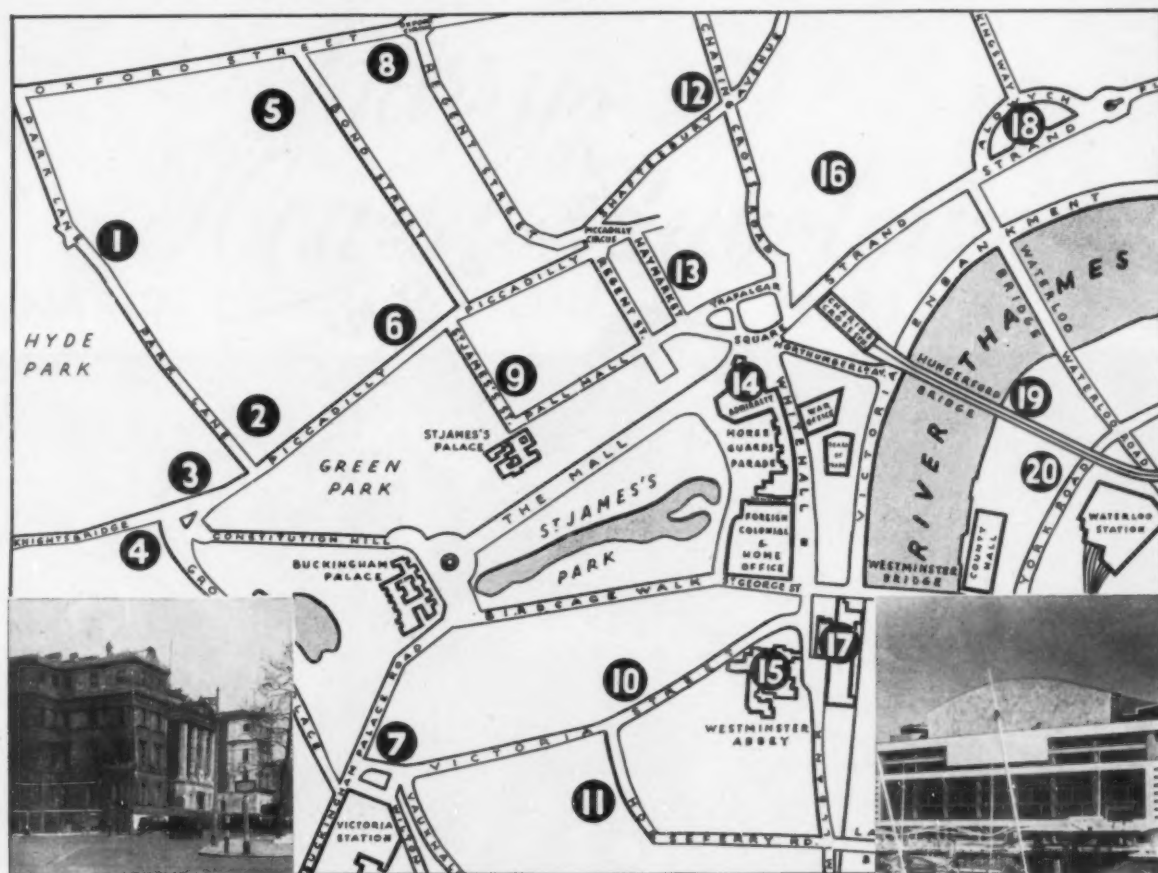
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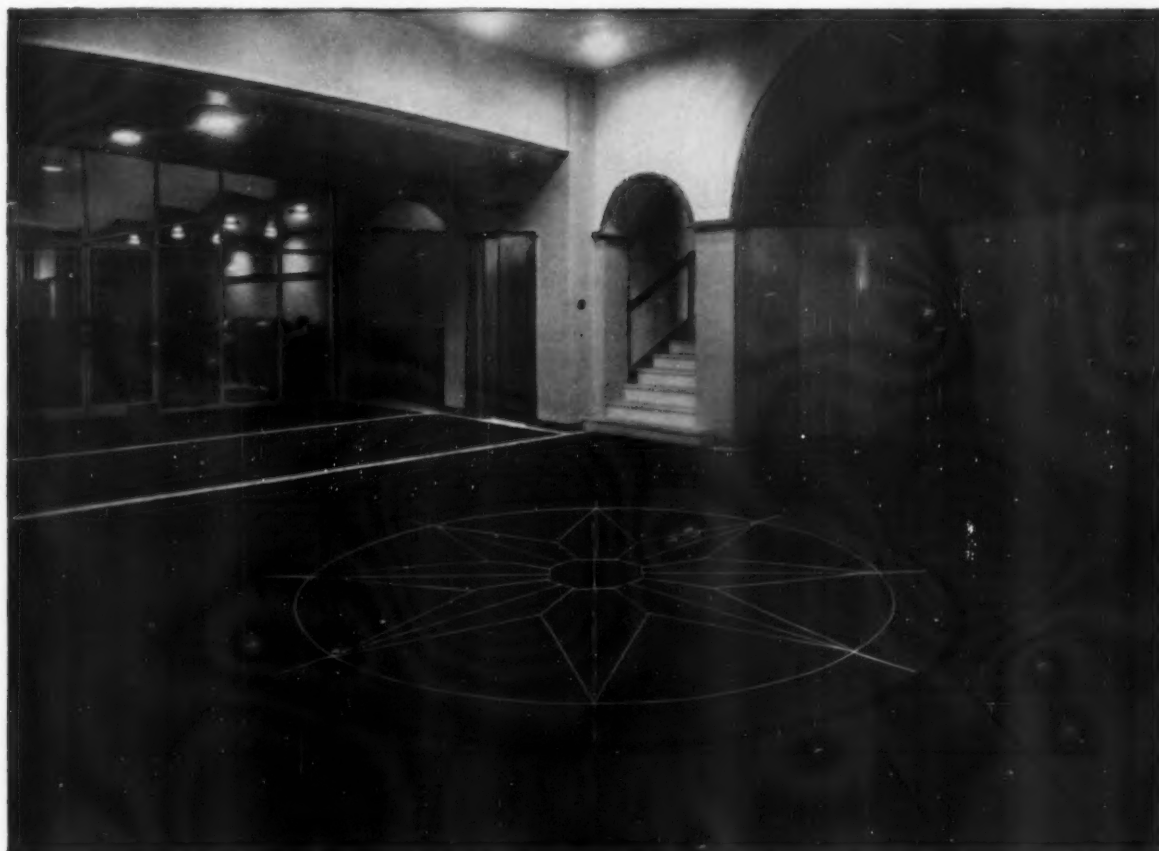


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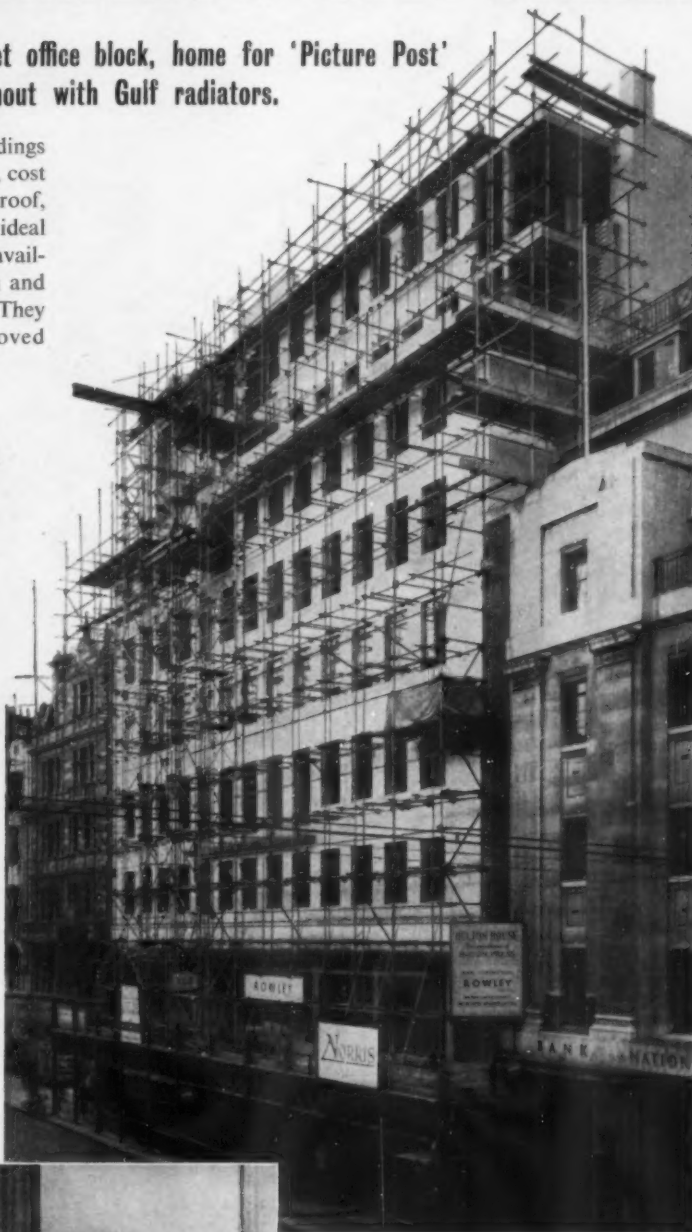


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Industrial Newspapers Ltd., have also installed Gulf long life radiators throughout their new building, John Adam House. The illustration at the left shows two panels at one end of the Boardroom.



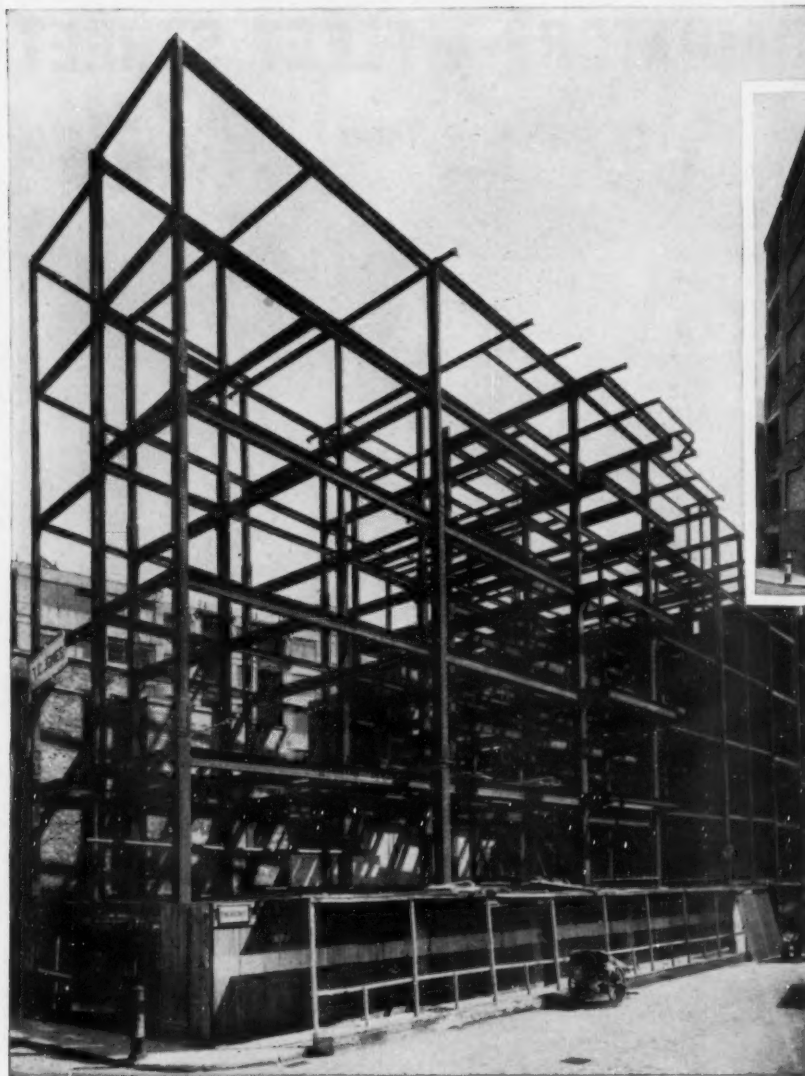
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CASE HISTORY No. 15

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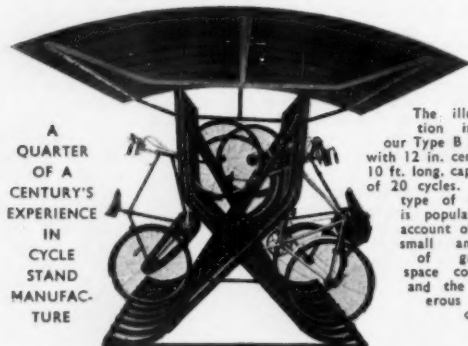
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# ABIX

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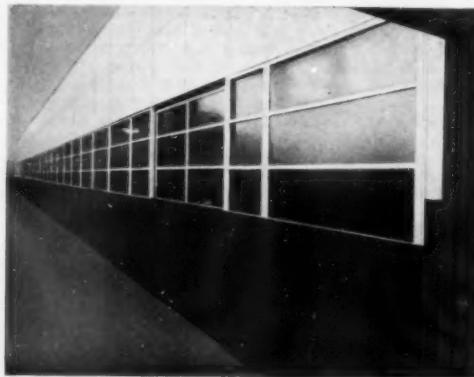


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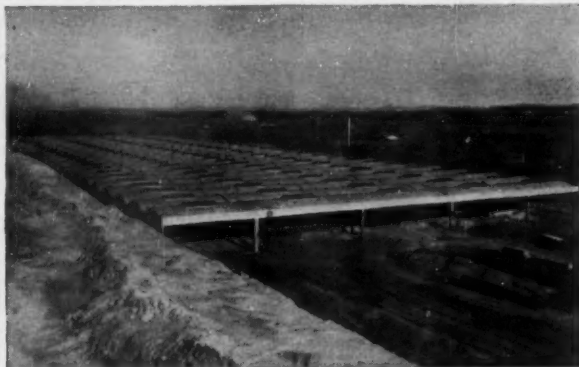
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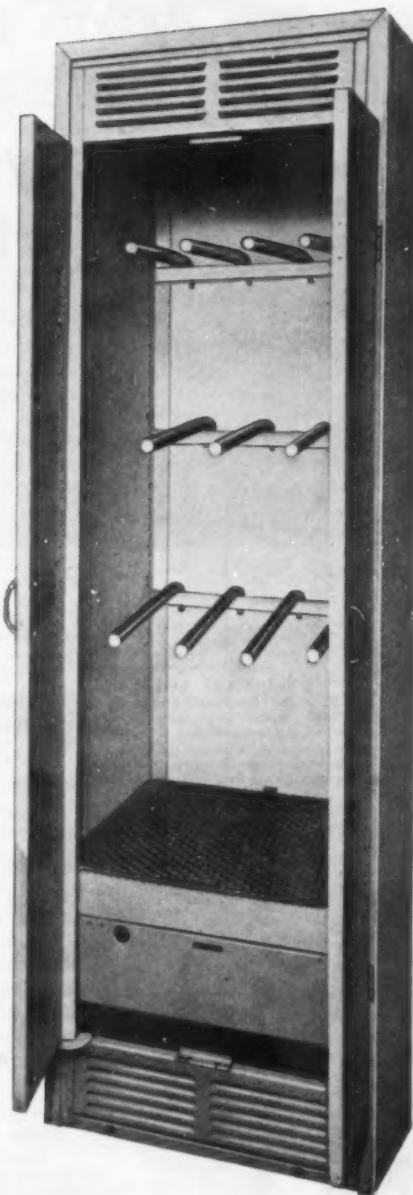
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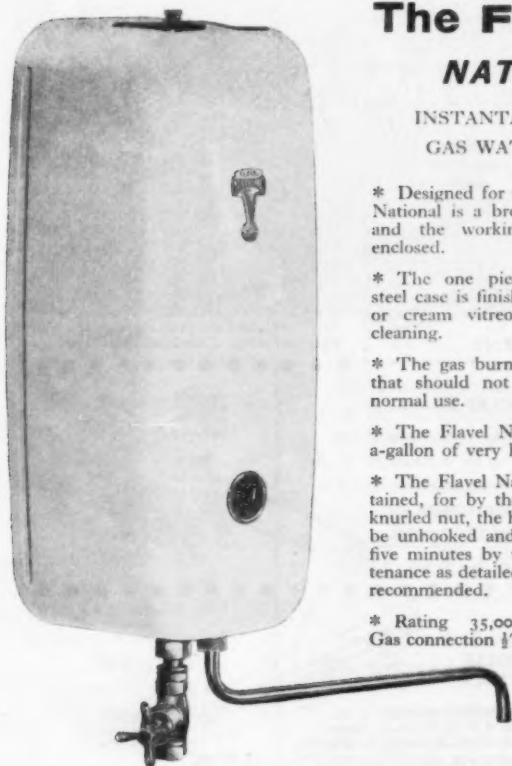
\* The one piece, easily detachable steel case is finished in gleaming white or cream vitreous enamel for easy cleaning.

\* The gas burner consists of 12 jets that should not require attention in normal use.

\* The Flavel National provides half-a-gallon of very hot water per minute.

\* The Flavel National is easily maintained, for by the removal of a single knurled nut, the heat exchange unit can be unhooked and cleaned in less than five minutes by the consumer. Maintenance as detailed above is periodically recommended.

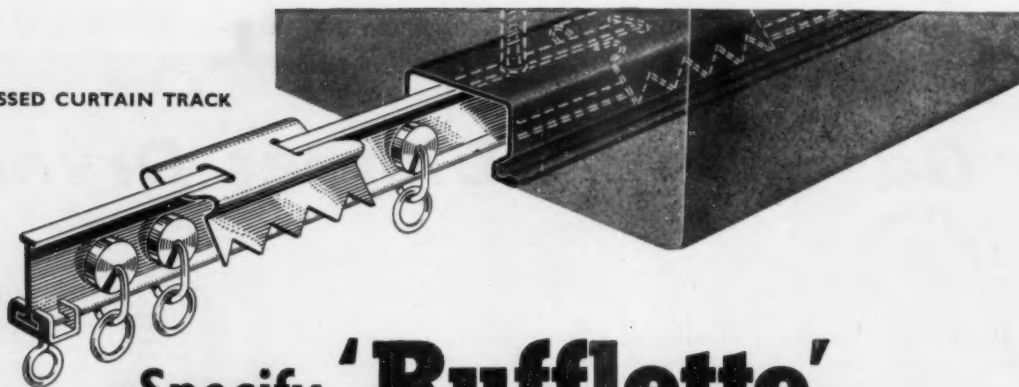
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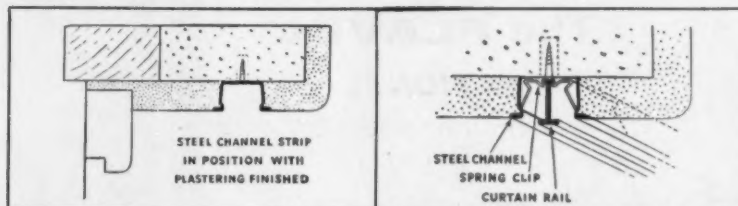
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Cubicle Track installations have been made for many hospitals including Edgware Gen., Mount Vernon, Richmond, Bushey Maternity, Northwood & Pinner Gen., Liverpool Stanley, East Suffolk & Ipswich, Southmead Bristol, Newcastle Gen., Darlington, Warrington Infy., and the Liverpool Royal Infy., and also for many municipal undertakings.

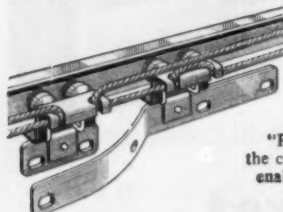
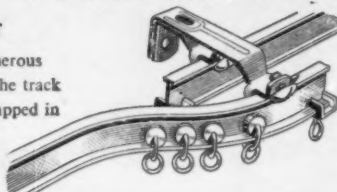


### B/L TYPE TRACK

A strong track for all types of window, with or without cord control. Brackets are top or face fixing, designed to save valuable time and cost on the job, the track being rigidly secured by a single front-facing screw.

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In order to give a generous overlap for curtains, the track can be cut and over-lapped in the centre, using the special BL7 bracket.

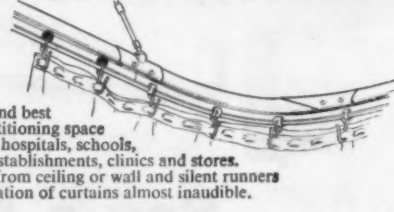


### CORD CONTROL

On straight track, curtains can be effortlessly opened and closed with this "Rufflette" Cord Control. Note the curved travelling section which enables curtains to be overlapped without cutting the track.

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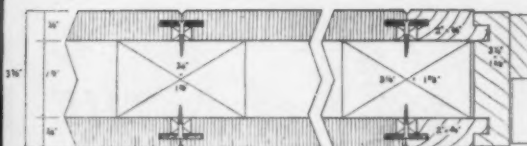
for  
OFFICE  
EXTENSIONS



A Private Office



A Dealing Room



General arrangement at verticals and door openings.

## ARCHITECTS:

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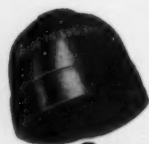
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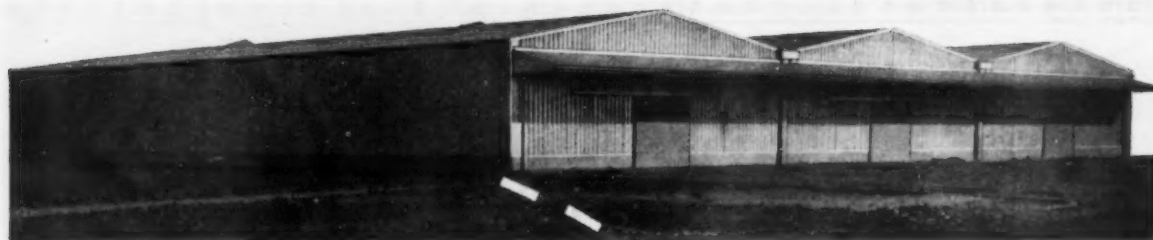
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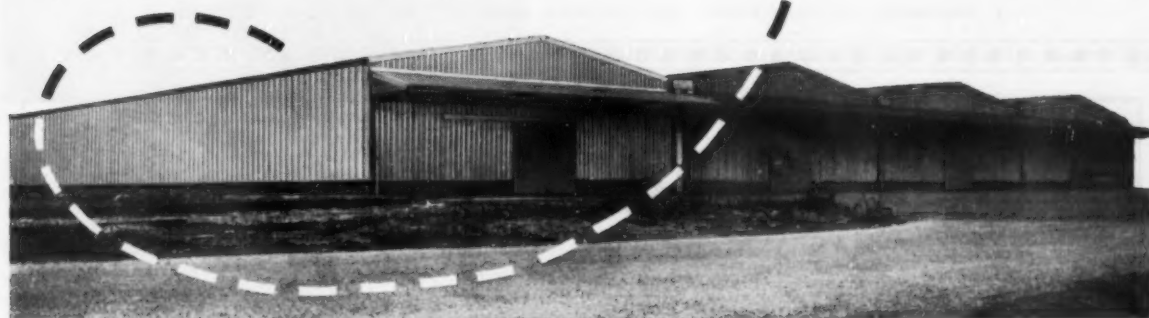
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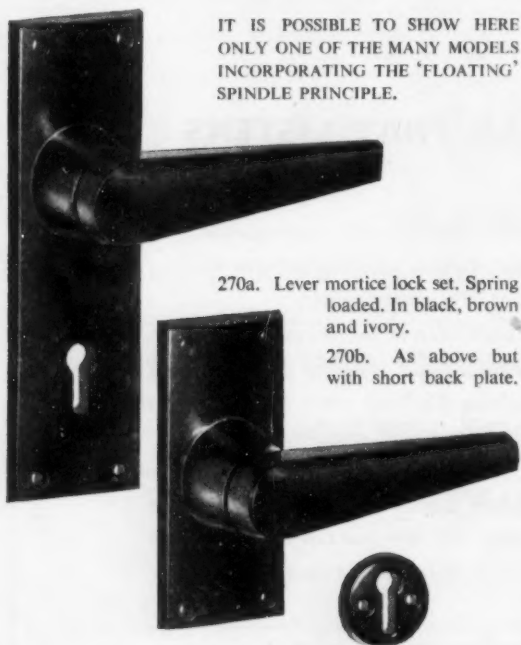
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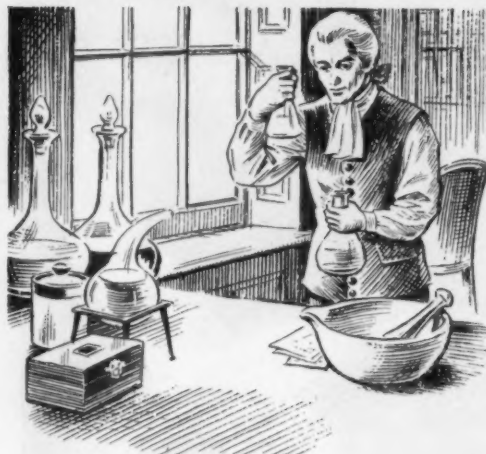
270b. As above but with short back plate.

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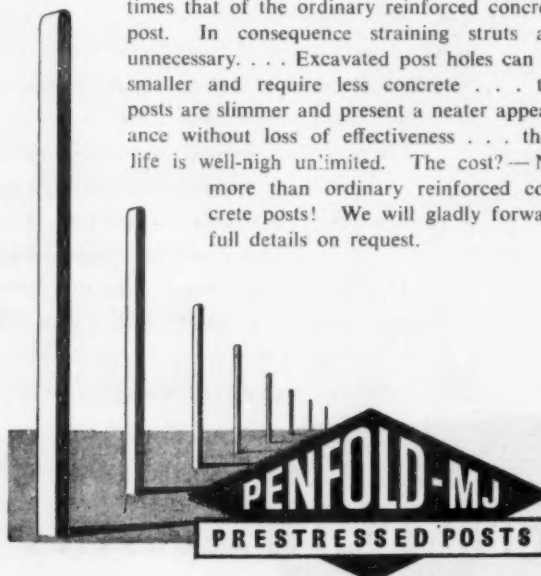
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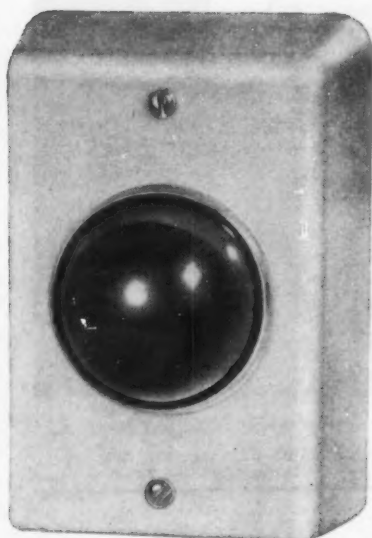
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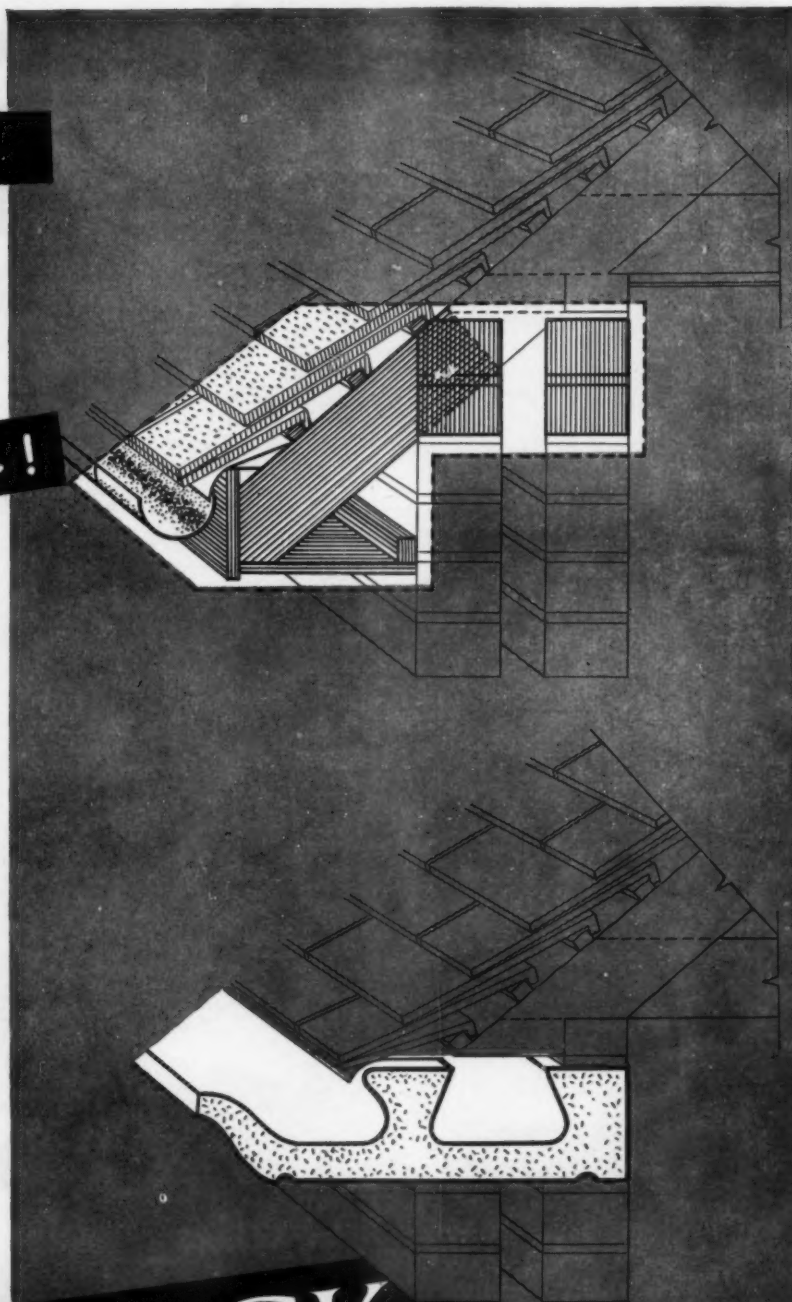
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## THE PRESIDENT'S ADDRESS

THE Conference Programme always dignifies these desultory remarks which are expected from the President at the Inaugural Meeting as an "Address". I assure you it will be nothing of the sort as I know you are anxious to get on with the real business of the meeting.

I must however express on your behalf and on my own our grateful thanks to the Lord Mayor for the warm welcome he would have given us and to say how delighted we all are to be back in Norwich after an absence of 26 years. No city could be more suitable for a conference of architects as there is so much of interest to see both in the city itself and in the surrounding countryside. The only doubt we had when considering the kind invitation of the Norfolk and Norwich Association to have the Conference in Norwich once again was whether there would be enough beds for all, having regard to the greatly increased number of members who attend our Annual Conference today as compared with 26 years ago. However that problem has been solved and it is not for me to discuss how; who will be sleeping with whom is a matter I am not going to enquire into!

We are extremely indebted to the Norfolk and Norwich Association for all the arrangements they have made. The Secretary will know better than any of us from his experience over the years what a vast amount of work is entailed in making these preparations. I understand that the local committee which is responsible sits at regular intervals for nearly twelve months. I think our special thanks are due to Mr. Humphrey Boardman, the President of the Norfolk and Norwich Association, who has acted as Chairman of the local Executive Committee and also Mr. Tomkins, their hard working Honorary Secretary.

And then I would say how very much we appreciate the hospitality the Lord Mayor and the City Corporation are offering to us in the shape of the Civic Reception which is being held this evening at the Castle; we are all looking forward to it very much.

We are also most grateful to the Lord Bishop for

kindly allowing us to have our Garden Party this afternoon in the Palace garden and also to the Dean and Chapter for so kindly combining Evensong with a special service for the members of the Conference. This is a feature which I should like to include in every year's Conference but it is not often that we have the privilege of meeting in a city which has such a lovely Cathedral as Norwich.

The serious business of the meeting is the presentation of the papers by three experts on "Architectural Economics" which those of you who have read the papers will agree is not nearly so dull as the title indicates. I have little doubt that there will be a very full discussion after the synopses of the papers have been presented by the three lecturers but just in case there should be a complete silence we have, by arrangement with the speakers, prevailed upon two or three people with special knowledge of the subject to initiate the discussion. I cannot but think that once it is started it will run on for its full course until the completion of the meeting tomorrow morning.

Before I make way for the speakers I should perhaps say one word about the follow-up of the discussions which we have at these Conferences. Arising out of the Torquay Conference two years ago when we had the masterly exposition on building materials and techniques by Messrs. Allen and Mills liaison has been made, and will go on being made, with some of the manufacturers of building materials which I hope and am sure will produce useful results. Following on the very wide range of discussion last year arising out of the paper by Sir Thomas Bennett and Mr. Woodbine-Parish committees have been considering all the various points which were brought up both in the papers and in the discussion and I understand that the Council of the Royal Institute are being recommended by the Executive Committee to produce a report in the Journal saying how the various points have been dealt with and what action is being taken. Similarly we shall make certain that anything tangible arising out of the papers and discussion this year is not lost sight of; it will be followed up.



**EVENTS AND COMMENTS ROYAL VISIT TO STOCKHOLM****GRENADIER GUARDS  
TERCENTENARY**

Unable to attend the Press view of the exhibition at St. James's Palace, I went to the Private View, with the result that I saw more past and present members of the regiment than exhibits. Progress round the show was slow but inexorable and so far I have had no time to return to see the things I missed. You do not need to be military minded to enjoy this admirable lesson in English history. The exhibition has been very well and plainly done by students of the Royal College of Art under the guidance of Sir Hugh Casson. Considering the large number of exhibits and the comparatively small area available the designer of the layout Mr. Keith Townend has done very well in avoiding any sense of crowding. He has managed to incorporate one or two vistas between exhibits which, used in conjunction with open bays containing large features such as regimental colours, or a marble bust and a group of drums, serve to divide the groups of smaller exhibits into digestible sections.

It was good to see the architects' own Grenadier, Mr. H. S. Goodhart-Rendel evidently enjoying himself. The catalogue lists over three hundred items ranging from portraits of the regiment's twenty colonels, to a group of life-sized figures dressed in the uniforms worn at different periods in the regiment's history. There are personal souvenirs, historic documents, arms, colours, silver paintings and prints in profusion. All this is seen against the splendid background of the principal rooms of St. James's Palace.

**MEDICAL EXHUBERANCE AT  
THE A.A.**

Dr. Stephen Taylor was the speaker at the last ordinary general meeting of the session at the A.A. last week. His subject was "Health Service Buildings other than Hospitals". Dr. Taylor is visiting research fellow of the Nuffield Provincial Hospitals Trust and works closely with Mr. Lewellyn Davies, the Trust's chief architect. He has very strong views on Health Centres believing that they should be domestic in scale and without pomp. One of his maxims is if the main entrance is for the use of doctors it is a bad plan, if it is for patients it is a good plan. Doctors, he says, should be humble—like architects. Dr. Taylor also has very strong views about architects and would like to have been one—had he not been a doctor. He hates large windows, particularly if they will not open. "Patients smell" he said, "so do we all." In addition to some very interesting remarks on building for group practice in old and new towns, Dr. Taylor gave a masterly review of the National Health Service. Most architects who have doctors as clients find them next to impossible. Dr. Taylor might prove an impossible client but he would be an amusing one.

When the Queen and the Duke of Edinburgh visit Stockholm this month, British Weeks will be held throughout Sweden. The Co.I.D. is co-operating with its Swedish counterpart the Svenska Slöjdföreningen in the staging of a display of British goods in a park in the centre of Stockholm. Some 200 items will be shown in showcases which will be lit up at night. I only hope that they will be better equipped against internal condensation than similar cases were at Hälsingborg last year. The exhibition will be open from 2-15 June and will later be staged at Gothenburg.

**TWO NEW M.O.W. GUIDES**

The season of guide books is here and even if you and I do not use them it is a pleasure to be able to welcome two delightful newcomers published for the Ministry of Works by H.M.S.O. The first on shiny art paper with a brilliant colour photograph on its cover deals in word, plan and picture with Hampton Court. It is just the right length for a person paying one visit and is at the same time an excellent souvenir for the tourist. The second on cartridge paper and decorated with line drawings by Eric Fraser, as well as photographs, tells the story of Kew Palace and, of course, the gardens. Both guides are well worth having and cost 1s. 6d. each.

**TREE GRUBBERS ON WESTERN  
AVENUE**

The main road approaches to London are at best nothing to write home about, but Western Avenue has some claim to be considered the best. Parts of it are as bad as parts of the Great West Road but both were planted with trees when they were made. Driving along the Park Royal stretch of Western Avenue some days ago I noticed that the trees on the south side had been brutally mutilated and uprooted apparently to enable a trench to be dug for some purpose. These trees were just beginning to screen the horrid architecture and although they were not very wonderful specimens it will take another 20 years to replace them. It would be interesting to know just why the trench could not have been put elsewhere. In many other countries, the trees, which were not large, would have been moved not murdered.

If the ultimate idea is to widen Western Avenue into a double track road so much the better, but even that would not excuse the stupid waste of twenty years growth.

**THE BIRTHDAY HONOURS**

Warm congratulations to all those architectural and near architectural characters named in the Birthday Honours List. I am particularly pleased about Robert Gooden who becomes a C.B.E. Hope Bagenal receives tardy recognition with an O.B.E. and Gilbert Ledward, Christopher Hussey and Jack Pritchard are similarly honoured. Mr. H. Connolly, the Essex County Archi-



tect, becomes a C.B.E., thus joining the quite considerable band of architects holding this honour. Professor Coldstream is to be knighted as is Mr. F. C. Hooper who is managing director of Schweppes and a member of the Council of the Building Centre. Mr. E. F. Muir, who recently succeeded Sir Harold Emmerson at the M.O.W., is another Knight.

### AMERICAN HOUSE BUILDERS

A party of 40 members of the National Association of Housebuilders paid a flying visit to this country last week as part of a six weeks' tour of Europe. They were whipped in by friend Walton Onslow, P.R.O. of the National Housing Centre in Washington, which is sponsored by the N.A.H.B. The Building Centre entertained them to tea before a lightning American style tour of the exhibition. They expressed themselves mightily impressed with the range of timbers available, the quality and variety of our bricks, and the workmanship and reasonable price of our manufactured articles and in particular of gas cookers. They had never seen a gas pistol before nor sprayed asbestos insulation.

### STRUCTURES

The current issue of "l'Architecture d'aujourd'hui" is devoted to structures of the type which I do not understand and which fill me with fear and misgiving. Most are of the sky-hook and pancake variety combining maximum excitement with, I suspect, minimum convenience, but all very wonderful to behold. The palm however goes to a charming picture of a 19th century design for a steel railway bridge spanning a rocky ravine through which a river flows. The bridge consists of a shallow box girder carried at its mid point on an inverted stepped church spire terminating on what appears to be a short cast iron corinthian column standing on a circular masonry base in the middle of the river. Each span of the bridge appears to be about 240ft and the depth of the main girder is about 10ft. The 'spire' tapers from 22ft to 2ft. I do not think that it was ever built.

### THIS GLASS BUSINESS

Curtain walling of one sort or another being all the rage, I note that some expensive lessons are being learned. Within quite a short radius of this office there are several buildings where coloured glass in some form is being used for the panel in-filling. On one building a great many sheets have cracked right across. It would be interesting to know why. My guess is that insufficient allowance was made for the additional expansion of coloured glass. By this I mean that coloured glass in absorbing more heat than clear glass will expand more and therefore needs more room. I am glad that I shall not have to settle who is to pay for replacing the damaged panels. At the same time I hope that the designers of the other buildings will not be faced with the same trouble. It is a great pity that for the general good more publicity is not given to failures of materials.



The Dutch National Monument recently unveiled by Queen Juliana Amsterdam. Architect J. J. P. Oud. Sculptor: The late John Raedecker.



and their causes. I suppose the law of libel and the fear of red faces all round tends to restrict the free circulation of this type of information.

### THE PROFESSOR WITH THE MELTING SMILE

Eileen Ascroft, writing in The Evening Standard, has chosen Sir William Holford as the best looking man in town and supports her claim with a photograph which gives the 'matinée idol' professor a crew cut and a clerical collar.

ABNER

## Norwich Conference Report

THIS year's Norwich Conference will be remembered by many people as the one-when-it-was-fine-for-the-Garden-Party. Not since the Conference was held in Northern Ireland in 1951, has the weather been as kind as it was on Thursday's sun-drenched afternoon in the grounds of the Palace of the Bishop of Norwich.

We arrived on Wednesday evening about business closing time and so had to thread our way through the inevitable traffic hold-ups to be expected at that hour. Being a stranger to the City, I was surprised to find it was larger and more hilly than I had expected; and I was impressed by the smart turn-out of the local policemen on traffic duty. At our hotel reception we found a young parrot perched in a cage who fixed us with a suspicious stare for a moment or two and then burst into speech. During our stay he never failed to join in on any conversation within ear-shot and seemed to contribute as much to the good temper of the staff as he did to the obvious enjoyment of visitors.

The first evening's informal reception was one of the cheeriest I can remember. Our hosts, the Norfolk and Norwich Association of Architects, could have chosen no better setting for their hospitality than the classic and finely proportioned rooms of Thomas Ivory's 18th century Assembly House; and no doubt the profusion of well-arranged flowers owed something to the visit of the Duchess of Kent, who had been entertained there on the previous day.

Thursday's inaugural meeting started with a technical hitch; the Lord Mayor of Norwich had been imperfectly briefed by his staff at the City Hall and failed to attend to give his Address of Welcome. This was more or less taken as read and the President went on to make his inaugural speech which you can read on another page.

In next week's issue you will be able to read for yourselves the gist of the Conference Papers, and of the two days' discussion. On this morning, the three speakers summarised their paper and I thought Doctor Martin's summary was particularly interesting. He gave figures to show how millions of pounds had been saved by architects as a whole, by keeping the cost per school place down during the past 5 years, instead of allowing it to rise with the prices of materials and labour in the same period. And he explained by showing slides, the tremendous value of research work into the planning requirements for buildings in the National Programme—such as Housing, Schools and Hospitals. The speakers chosen to open the discussion were both Quantity Surveyors. Mr. S. N. Rose from the Ministry of Education had some useful points to make about Elemental Bills of Quantity; but few people in the well-filled Stuart Hall could have heard him clearly. Mr. C. M. Nott, of the Hertfordshire County Council wanted the Quantity Surveyor to lead the building team in the matter of cost investigation.

I was not surprised to hear the Bishop of Norwich tell us at the Conference Dinner that 3-4 thousand people in a season enjoy as guests the Garden of the Bishop's Palace which has been the Palace's for 800 years. The lawns, the tall trees, the ruins of an early Palace Gate, the scale of open space to the nearby Cathedral make an ideal setting for the Garden Party which took place in the afternoon after the inaugural meeting. Following on after the garden party, it had been arranged to hold Evensong in the Cathedral specially for Conference members. The President read the Second Lesson. The Dean gave the Address and had some nice things to say about Basil Spence's design for Coventry Cathedral, but thought that many modern churches failed in their purpose and missed the quality of beauty. The service ended with the hymn "All Things Bright and Beautiful," sung to a chant I had not heard before; but rather liked after a few verses. We learnt later that it was the organist's choice; and his decision in these matters is final.

The same evening the Lord Mayor's Reception in Norwich Castle was an equally unforgettable occasion, and one when the entire museum and art gallery were thrown open to view. The wonders of the Coleman collection of John Crome and J. S. Cotman water colours and those of other painters of the Norwich School are no exaggeration. I would like to have had more time to study the exhibition: "East Anglican Buildings" which John Summerson had opened on May 26th at the Castle Museum. The Exhibition continues on view until August 26th and is well described and illustrated in a booklet published by the Norwich Museum's Committee, who organised the exhibition with the help of the Norfolk and Norwich Association of Architects.

Friday morning's discussion of the paper was more lively than on the previous day. Mr. Jefferiss Mathews, one of the joint authors, summed up points from the previous day's proceedings, and both Dr. Martin and Dr. Weston, the other joint authors of the paper, answered questions in the general discussion which ended at noon to allow time in the afternoon for visits to places of interest.

The offer of a lift to see the Smithson's Hunstanton School tempted me more than the tours, good as they were. I had heard it said that exposed steel work of the school was beginning to show corrosion; in fact parts of the steel fascia I found had been repainted. The school is just like you see it in the photographs. Personally I like its proportions, colours and planning very much; dislike seeing through glass, furniture stacked for storage and a number of other features. I look forward to the Smithson's next work.

The Conference Dinner at the Samson and Hercules House on Friday was the last of the formal events; and, incidentally, the last occasion for Eric Bird to ap-

pear as Editor of the R.I.B.A. Journal, although nobody mentioned it in the speeches. There were six speakers. Mr. Charles Saxon, Vice-President, R.I.B.A., proposed the City of Norwich toast in a most fluent manner and the response by the Lord Mayor, Councillor Arthur South, who had been in office nine days and a City Councillor twenty-two years was one of the best mayoral speeches I have heard. Other speakers were: Lt.-Col. Sir Bartle Edwards, Chairman of the Norfolk County Council, Mr. C. H. Aslin, President R.I.B.A., Mr. Humphrey Boardman, President of the Norfolk and Norwich Society of Architects, and last of all, the Bishop of Norwich. The end speaker at the close of a

longish toast list, may sense the beginning of impatience—the scarcely muffled cough and fidgeting feet—of those who have to listen. Not so on this occasion; the Bishop had everyone spell-bound from the start. He warned architects (woe betide them if they forget) that a great responsibility lay in their hands; that they had no business to resent criticism; that not only were their ideas important but the impact their ideas made on other people's lives; that because times were new, it did not mean nothing old was any good; that copying the old was not architecture although it might be craftsmanship; to remember the dominant idea should be beauty—and so on. It was a good finish to a good Conference.

G. M.

## NEWS

### The Birthday Honours

*Knights Bachelor:* William Menzies Coldstream, painter, and Slade Professor Fine Art, University of London. *Frederic James Osborn*, chairman, executive committee, Town and Country Planning Association, Allan Stephen Quartermaine, president, Institution of Civil Engineers, 1951-1952. *Frederic Collins Hooper*. *K.C.B.:* Edward Francis Muir, Permanent Secretary M.o.W. *C.B.E.:* C. E. C. Hussey, for services to architecture. A. B. Mann, Chief Mechanical and Electrical Engineer, M.o.W. T. H. H. Turner, lately chairman, Cwmbran Development Corporation, Monmouthshire. H. Connolly, Essex County Architect. R. Y. Goodden, Professor of design, Silversmithing Department, R.C.A. *O.B.E.:* P. H. E. Bagenal, for services in the field of acoustics. Gilbert Ledward, sculptor, for services to the Royal Mint. J. C. Pritchard, Director and Secretary, Furniture Development Council. C. J. Saltmarsh, lately editor, monitoring service, British Broadcasting Service. (Former assistant editor, A. & B. N.).

### Herts: Craftsmanship

The Hertfordshire Chapter of the Essex, Cambridge and Hertfordshire Society of Architects are inviting nominations for the Award of the Certificate of Craftsmanship for 1955/56 in respect of work executed in the County of Hertfordshire within the past two years. The award is made in two classes: 1. For general excellence of workmanship. 2. For an individual piece of workmanship. Further particulars from the Hon. Secretary, W. Wesley Turney, L.R.I.B.A., of 63 Wood Street, Barnet Herts.

### Building Advisory Service

The N.F.B.T.E., who are responsible for the Building Advisory Service, has produced a brochure describing the work and aims of the Service. This will be distributed to members of the Federation and also to many other interested parties in an endeavour to arouse more interest amongst the

medium and small size firms than has hitherto been shown. The aim of the service is to advise Builders on how to lower their costs and increase productivity. It is available to all building undertakings in the United Kingdom whether they be members of the Federation or not. Investigations are undertaken in connection with any of the following subjects—Work study, incentives, materials handling, mechanisation, programming, site organisation, costing, office organisation, and personnel administration. A fee of £15 per day including subsistence and travel is charged for the service.

## In Parliament

### Moving the Temporaries

The Minister of Works was questioned about the dismantling and sale of prefabricated houses. He stated that up to the end of April contracts had been let for the dismantling and sale of 2,927 of these temporary houses. Normally the refrigerators in them were disposed of separately. He understood that the purchasers had exported a considerable number of the houses, but he had no precise information. Six houses had been sold direct to overseas buyers at an average price of £150 including refrigerators. In addition 2,238 had been sold to local authorities as they stood. Mr. Hunter said that reports had appeared that middlemen had sold these prefabricated houses to Italy, Switzerland and Holland at prices up to £1,500, and he asked for an investigation. Mr. Buchan-Hepburn promised to look into it. He explained to Mr. Collins that the practice was for the houses to be advertised and put up for competitive tender. Mr. Gibson asked on what grounds and policy the pulling down and sale of these temporary houses was justified, in view of the great demand for housing accommodation. Mr. Buchan-Hepburn pointed out that the Housing (Temporary Accommodation) Act, 1944, provided that after 1954 local authorities would be entitled to have the houses removed

unless the Minister of Housing and Local Government and the Secretary of State for Scotland considered the housing conditions necessitated this retention. The Ministry of Works really acted as agents for the Sales. (May 29).

### Local Circumstances

Mr. Collins, in a question to the Minister of Housing and Local Government, asked what advice he had given to local authorities about the re-erection, by the authority or private persons, of dismantled prefabricated houses. Mr. Powell, the Parliamentary Secretary, told him that the Minister had given no general advice on this subject.

### Fixed Price Tenders

Mr. Nabarro asked the Minister of Works what action he proposed, in connection with the policy of extending the area of fixed price contracts with a maximum value of £100,000, to permit price variations or escalator clauses in respect of increased charges by nationalised coal, gas, electricity and transport industries that might occur during the currency of the contracts, and in consideration of the fact that private enterprise contractors had no control over these charges. Mr. Buchan-Hepburn's answer was — "None. The point of my experiment of seeking fixed price tenders for selected projects undertaken by my Ministry is to find contractors who are prepared to accept all risks of fluctuation in costs". Mr. Nabarro commented that while fixed price contracts were desirable in principle the policy could not be effective as long as nationalised industries continued the practice of increasing their charges, leading to increases in price of power, freights and steel. Mr. Buchan-Hepburn replied to this scheme, at present limited to certain projects by his Ministry, was a voluntary one. There was no compulsion on anybody to come forward on the terms they suggested. The wider subject was a matter for Ministers concerned with the nationalised industries. (May 29).



## BARBICAN REDEVELOPMENT

**T**HE architects, Messrs. Chamberlin, Powell & Bon, were appointed by the Corporation of London to prepare a report for the Court of Common Council on the possibility of residential development within the Barbican area. At a press conference on Friday, 25th May, the scale model of their scheme and many plans and drawings were on view, and the architects present to discuss their proposals.

These envisage the creation of an independent residential neighbourhood with its own amenities and services which would at the same time become a cultural centre of the city, and complimentary to the large business and commercial districts. It was pointed out that the boundary of the site coincides approximately with the boundary of the parish of St. Giles-without-Cripplegate. In 1851 the population of this parish was 14,361 yet in 1951 it had fallen to 28—a meagre total for the 30 acres being considered for redevelopment in the heart of the City. The architects suggest the building of 17 blocks of flats which together would house about 6,700 people in 2,355 separate dwelling units.

### Garden development

Underlying the overall conception has been the desire to turn the existing "desert" into a garden surrounded by these flats and new buildings for the City of London School, City of London School for Girls and the Guildhall School of Music and Drama. Flat units themselves are concentrated either in the three 30-storey point blocks

or a series of long, compactly planned terrace blocks which leave much of the ground free for open development and garden planning.

Motor traffic would be excluded from this garden area which is intended for pedestrians only.

### Building groups

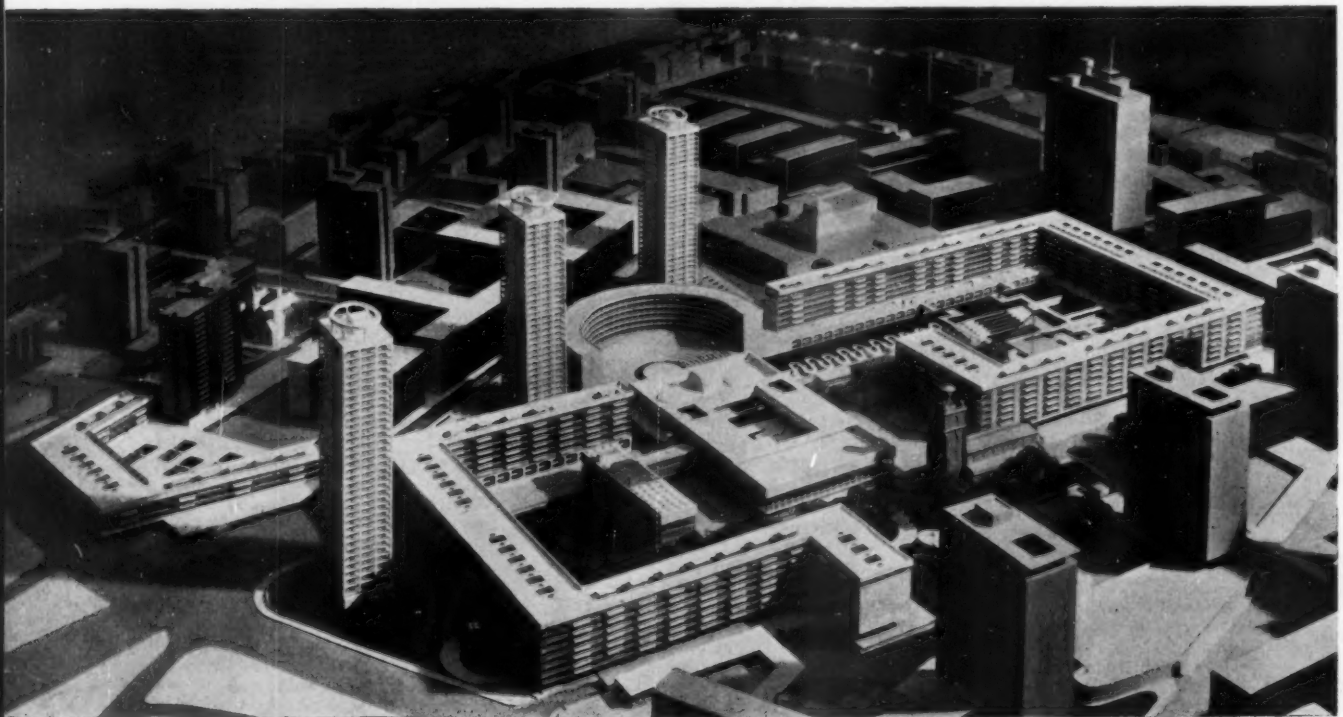
To avoid monotony in such a large scheme the blocks of buildings are ranged in groups. The three point blocks south of Barbican echo the high commercial buildings forming part of the Martin/Mealand proposals on the south and east and complete the series of vertical elements which surround the central part of the layout. Lower terrace blocks have been grouped to embrace or define certain parts of the garden development and the schools are in a series of relatively low buildings around a cloistered quadrangle. It is this quadrangle which forms the heart of the whole scheme.

Linking the office blocks flanking route II and Moor Lane are the podia which form a pedestrian walk-way some 20ft above ground. This feature is carried round the base of two of the point blocks, in the terraces projecting into the garden to east and in the podium from which rise the terrace blocks to north. The walkway, therefore, forms a continuous link between the commercial and residential blocks.

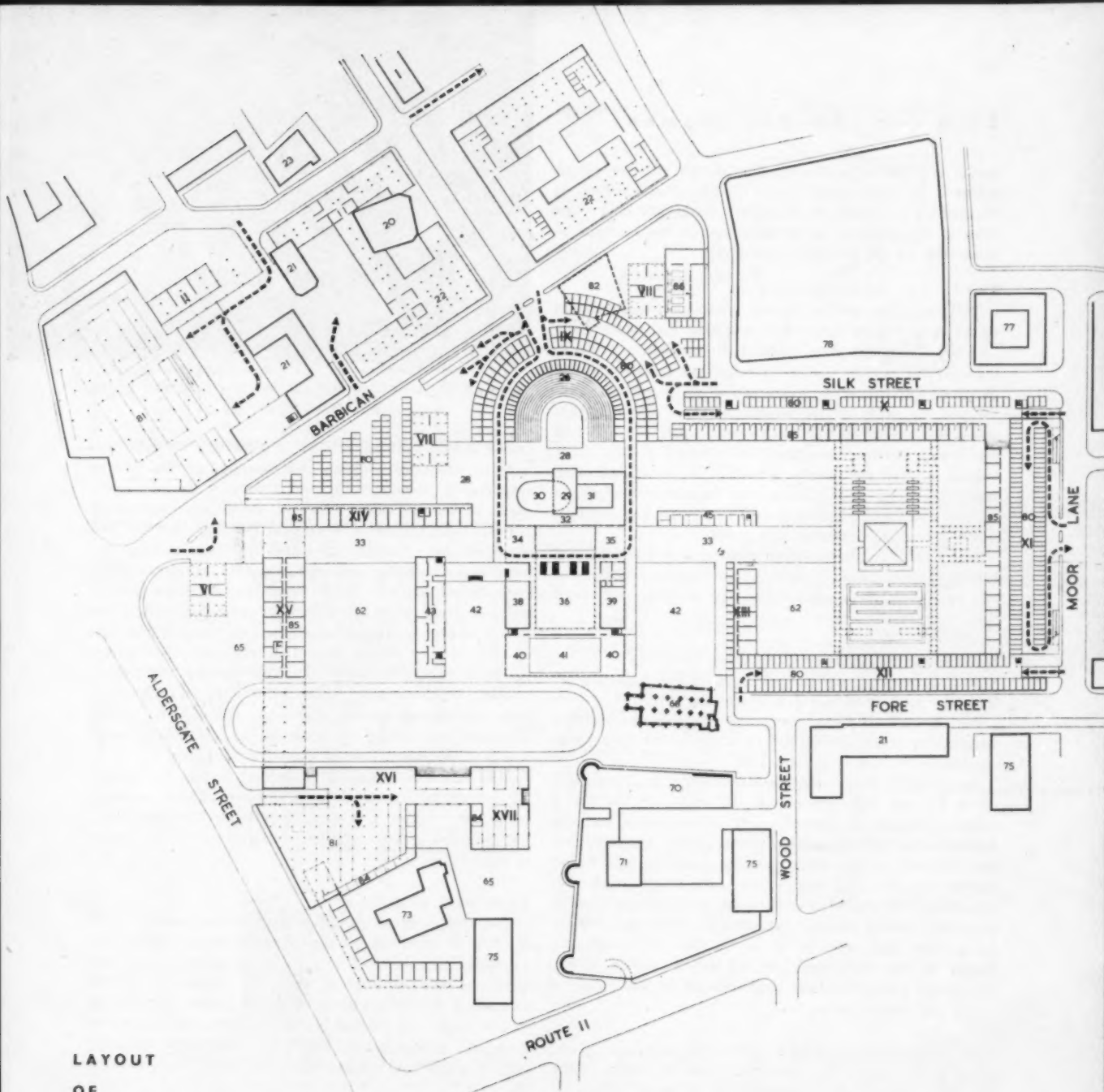
Paths, planting and ornamental water have been given considerable emphasis in the planning and general layout so that they will serve as additional elements for tying the

*Continued on page 622*

*Model of proposed scheme*







# LAYOUT OF PROPOSED DEVELOPMENT

I 16 storeys of flats. II 16 storeys of flats. III 3 storeys of flats above shops and garages. IV 3 storeys of flats above shops and garages. V 3 storeys of flats above shops and garages. VI 31 storeys of flats rising from the sunken moat. VII 29 storeys of flats above 2 storeys of garages. VIII 29 storeys of flats above 2 storeys of garages. IX 6 storeys of flats above 2 storeys of garages. X 6 storeys of flats and maisonettes above 2 storeys of garages. XI 7 storeys of maisonettes above 2 storeys of garages. XII 7 storeys of flats and maisonettes, open at ground level. XIII 8 storeys of flats and maisonettes. XIV 8

storeys of flats and maisonettes. XV 9 storeys of flats and maisonettes. XVI 7 storeys of flats and maisonettes, open at ground level. XVII 7 storeys of flats and maisonettes, open at ground level. 20 Cripplegate Institute. 21 existing office buildings. 22 new office buildings. 23 Methodist Chapel. 24 public open space. 26 amphitheatre. 28 ornamental water. 29 stage and workshops. 30 theatre. 31 concert hall. 32 art gallery. 33 Broad Walk. 34 west portico. 35 east portico. 36 quadrangle containing pavilion for Lord Mayor's coach. 38 Hall of the City of London School. 39 Hall of the City of London

School for Girls. 40 gymnasium. 41 swimming bath. 42 paved forecourt. 43 City of London School; teaching block. 45 Guildhall School of Music and Drama; music practise block. 62 lawn. 65 sunken grass-covered moat. 66 bosage of trees. 68 St. Giles Church. 70 London Wall Restaurant. 71 Barber Surgeons Hall. 73 Ironmongers Hall. 75 18 storey office block. 77 City greenyard. 78 Whitbread's brewery. 80 garages. 81 covered car park. 82 electricity supply station below. 83 existing office buildings. 84 shop stores. 85 court level flats. 86 district heating station.

## Barbican Re-Development

design together as a whole. The design emphasises the necessity for open spaces in the City by allowing them to be used by the pupils of the schools during the day, when most of the residents are at work, and in the evenings or week-ends by the residents themselves.

### Roads and underground

To compensate for the closing of existing roads between Barbican and Fore Street it is proposed that Moor Lane and Silk Street should be substantially widened. By decking over the existing district underground, residents would be protected from train noises and at the same time good use can be made of the additional space above. Main sub-ground utility would remain where they are to avoid the heavy expense that must be involved if they were moved. Perimeter roads would, it is considered, give sufficient access for vehicles and extensive garages at ground and basement level are provided—the garages have direct access from surrounding roads.

The architects consider that land north of Barbican and east of Golden Lane is unsuitable for housing development and have therefore suggested that this should remain zoned for commercial building.

### Detailed proposals Cultural centre

In the central group of buildings is a theatre, a concert hall, the school halls and a swimming bath. A section taken through this area shows that the relative building heights decrease from highest to north to the open space extending to route II in the south.

By grouping these large elements around the quadrangle on a 1-storey high podium at the centre of the site a cultural nucleus is created. The consideration that the buildings may also be used by outside bodies has prompted the architects to plan more generous buildings than would be the normal. The theatre and concert hall could each seat some 700 people to a standard which would make it possible to obtain licences for public entertainment and the foyers can also serve as an art gallery. Although the height of these buildings is limited to four storeys or less the group could be made large enough to dominate the estate and form a focus.

### Residential buildings

In order that a fair assessment can be made of the income which might reasonably be expected from the



Model of an earlier scheme for the site prepared by the architects in June 1955.

letting of flats these units were designed in some detail.

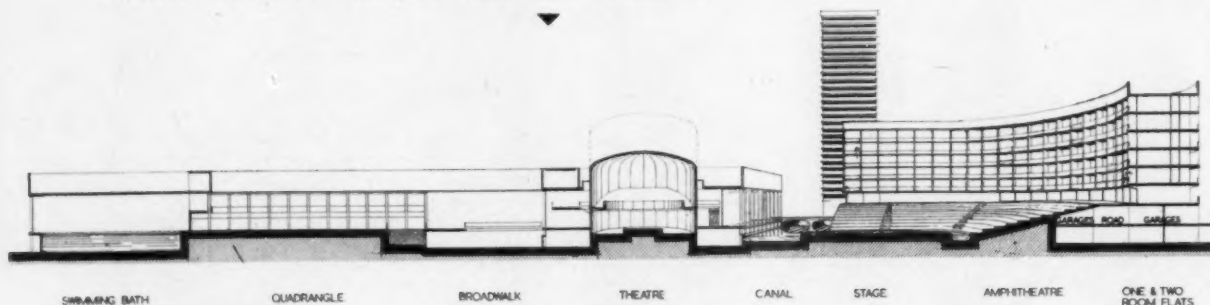
Many maisonnettes have been included as this type of dwelling is considered by the architects to have technical advantages and they are becoming increasingly popular with tenants. Owing to the high cost of lifts, direct lift and staircase access flats have been avoided and most of the dwellings are approached by corridors—either centrally placed or to North where the loss of an external wall is least serious. Following on this conception flats have been planned to catch the sun during at least part of the day. Many flats are planned with rooms en suite separated only by large sliding or folding screens. Such designs it is hoped will do away with the sense of boxiness usually associated with a series of self contained rooms and yet keep the cost of the buildings within a reasonable limit of capital expenditure.

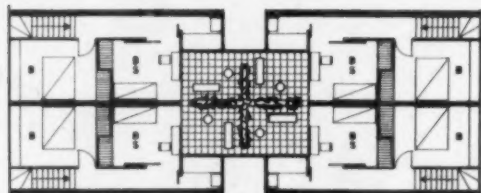
This economic planning is carried further by placing many bathrooms and some kitchens, internally. An arrangement which makes it possible to plan on a comparatively narrow frontage while allowing living rooms the full benefit of external walls.

### Cost and erection

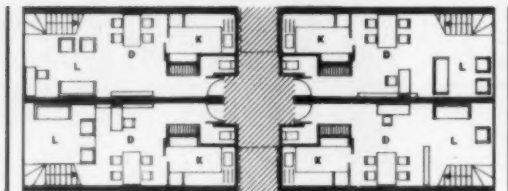
The total area of ground subject to the present report is some 30 acres but the model and drawings which were submitted cover a much larger area of approximately half a square mile in order to show the relationship of the architect's detailed proposals to all the known surrounding developments. At current prices the estimated cost of the architects' scheme is £10,500,000; and if approval was given they consider that this scheme would seven years to complete.

### Schools Theatre, Concert Hall and Block 9

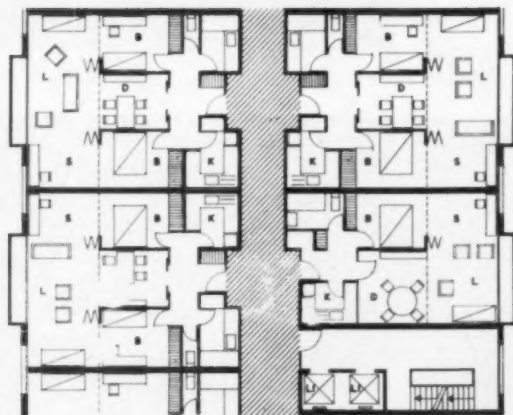




ROOF TERRACE

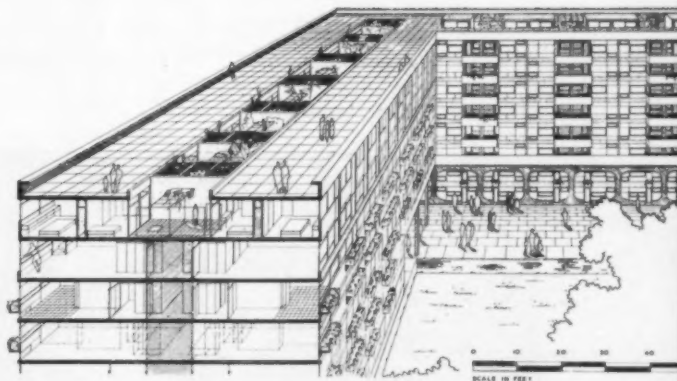


LIGHT & VENTILATION FROM ABOVE



◀ Blocks 4, 13, 15 and 17. Typical flat plans.

KEY PLAN ▶

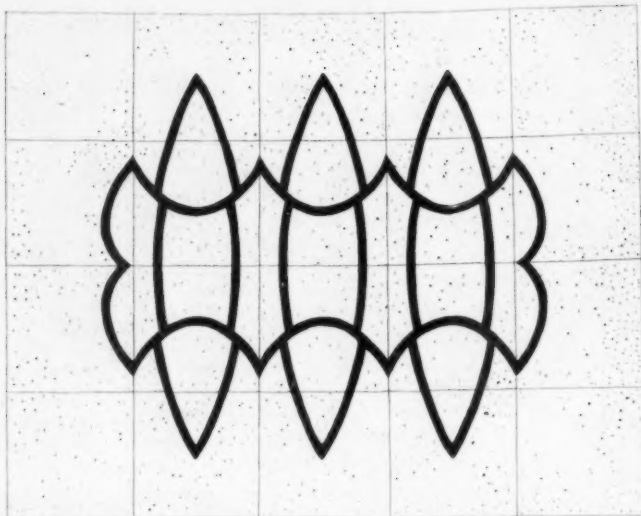


▲ Sectional perspective of terrace blocks

Looking towards a tower block across the garden and glasshouse in foreground







*Pattern on cornice*

*View from gardens to west*



*Looking towards St. Paul's*



## GATEWAY HOUSE, Near St. Paul's

architects: TREHERNE & NORMAN PRESTON AND PARTNERS

consulting engineers: R. Travers Morgan & Partners

**G**ATEWAY House which was officially opened on Monday is now the London headquarters for the Wiggins Teape & Alex Pirie (Sales) Ltd., and is one of the first of the major office buildings to be completed in the immediate area of St. Paul's.

Four roads lay down the boundaries of the site—Watling Street to north, Bread Street to east, Cannon Street to south and between the cathedral to west is New Change, a new road.

The L.C.C. demanded that the main office entrance should be off Watling Street and in addition gave various building lines which had to be adhered to on the west and east boundaries. Running north-south right through the site centre is a public right of way—Friday Street—and this had to be left open. In addition there were regulations to be adhered to in regard to the requirements for St. Paul's Precincts.

### Design

All these restrictions more or less dictated the form of the plan; the two boundaries on the east and west were fixed and the logical step was to follow the curve of Watling Street for the main wing. Friday Street was retained as a public way by making a passage right through the building, on the ground floor, and separating this from the rest of the building by glazed screens.

Throughout, the treatment of the scheme has respected the proximity of St. Paul's and other buildings. Thus the height restriction was limited by the height of the main cornice of the Cathedral and the projecting cornice of the office building is 90 ft above

pavement level. This cornice is also the same level and projection as the cornice of the Bank of England which is under construction on the site to north.

### Planning

The sections show that the building has two basements. One of them is a parking garage for some 30 cars and the other, the lowest, is a bulk storage. This basement is totally enclosed by 2 ft thick R.C. walls and if the occasion should arise it could be used as an air raid shelter.

Above these rise the six floors of offices and topping the whole structure is a penthouse and lift motor room. A caretaker who has one of the best views over London lives in a flat in this penthouse; and the rest of it is a coffee bar for the staff.

The building has a total of 166,000 ft sq of usable floor space.

### Construction

Orthodox beams are totally eliminated by the adoption of flat slab construction. This has a heavily reinforced "plate slab" in lieu of an edge beam which runs back 2 ft from the slab edge. The rest of the floor is of hollow pot construction.

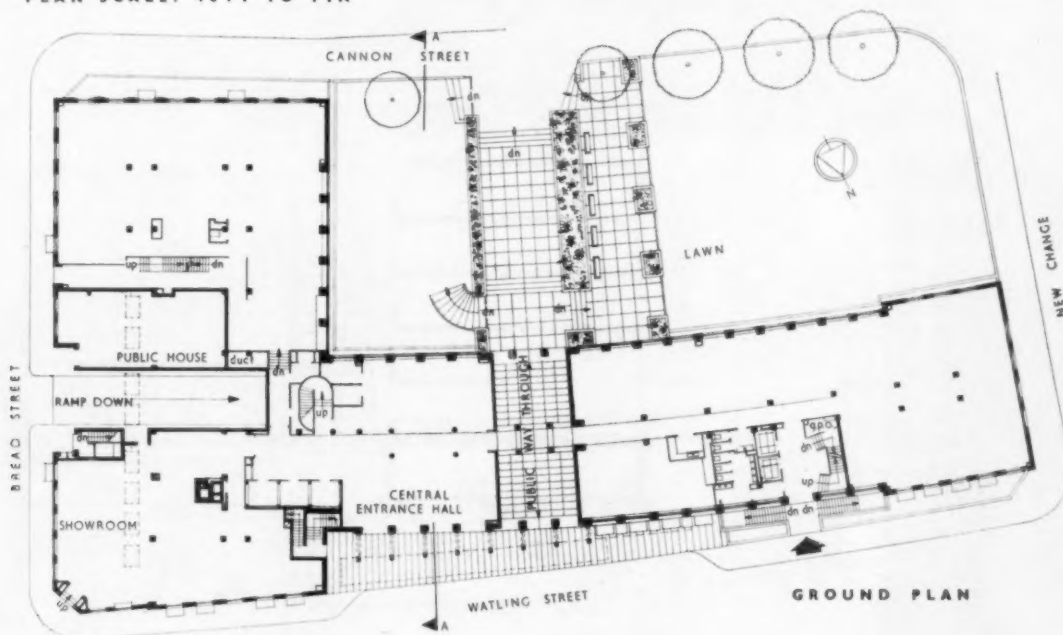
With this simplification of shuttering the erection time was rapid and with the job in its stride the contractor was casting one floor every two weeks.

### Internal services

The whole of the building is served by an elaborate communication system of pneumatic tubes at strategic points on the office floors. Teleprinters from the old

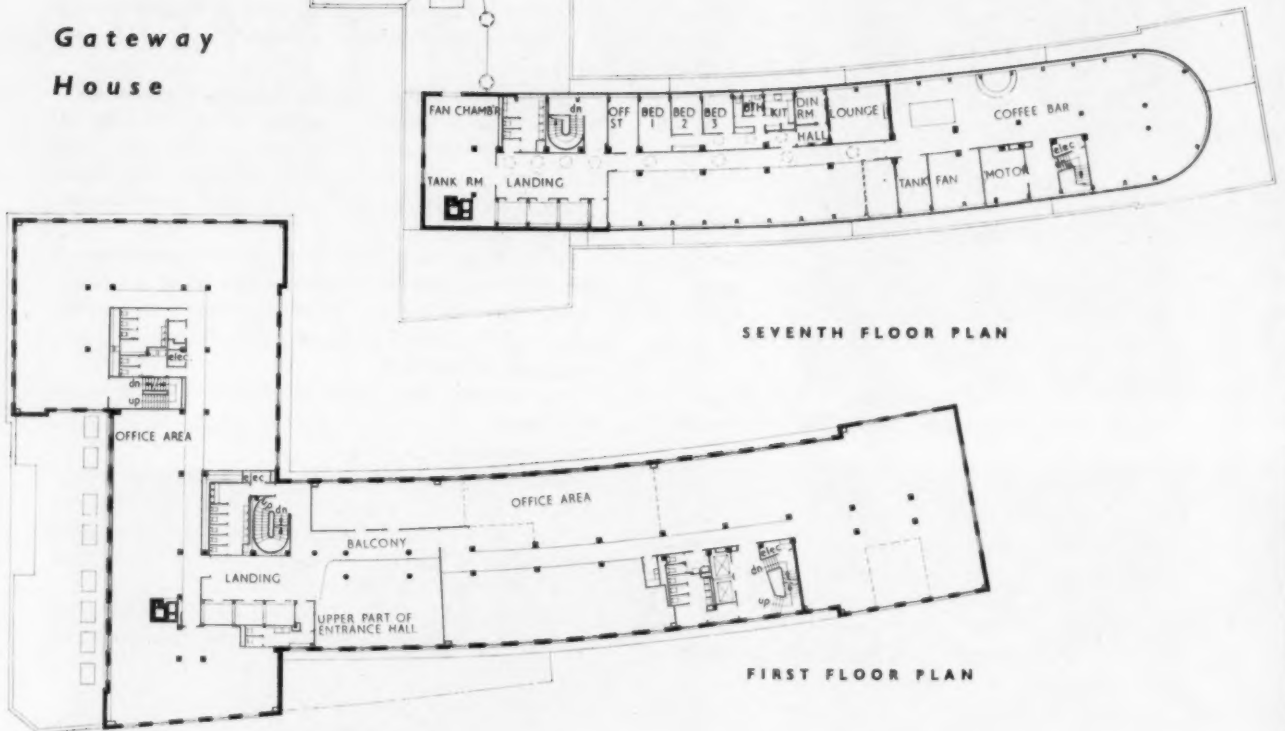
*Continued on page 629*

PLAN SCALE: 48 FT TO 1 IN

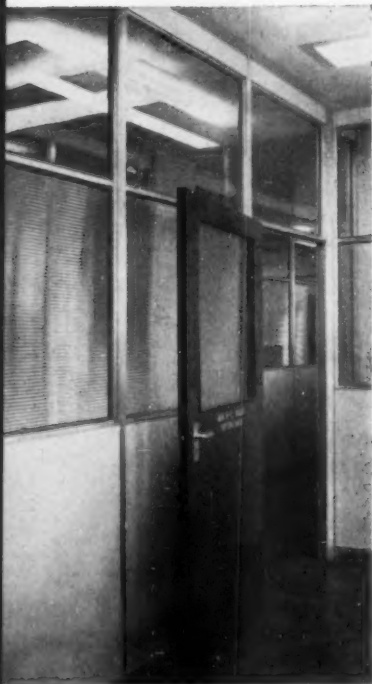


# Gateway House

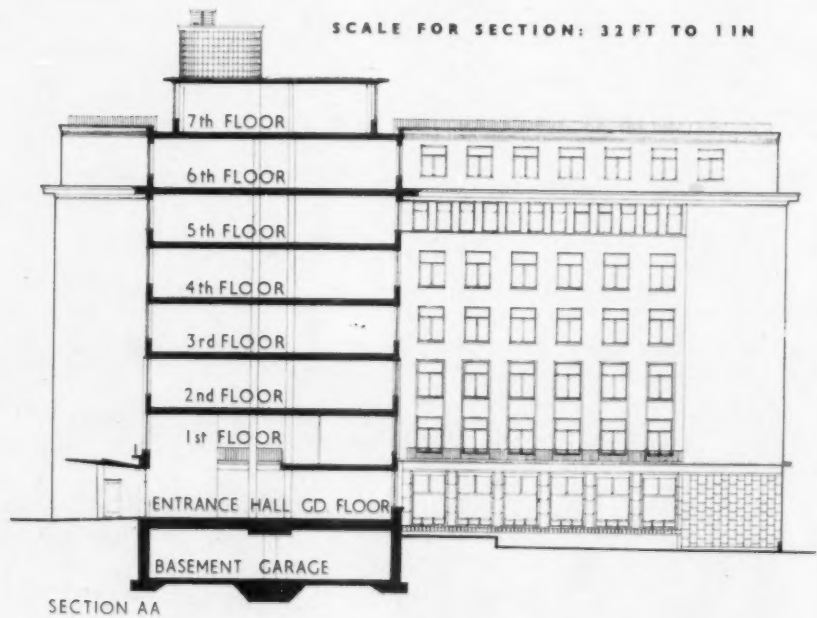
SCALE FOR PLANS: 48 FT TO 1 IN



Office partitions



SCALE FOR SECTION: 32 FT TO 1 IN



General Contractor:

TROLLOPE & COLLS LTD.

Subcontractors:

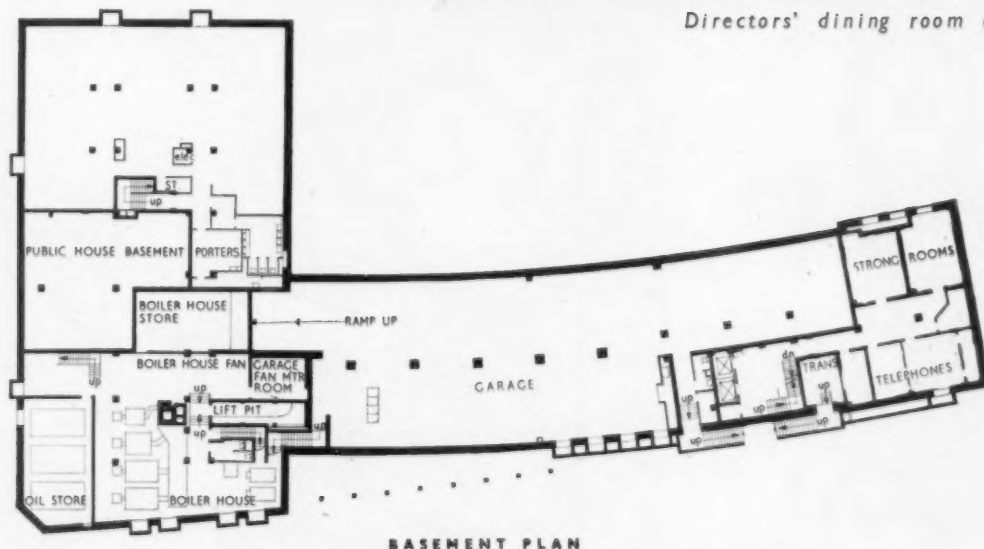
Acoustic Tiles: May Acoustics Ltd. Asphalt Tanking & Roof: Highways Construction Co. Ltd. Anti-condensation Ceiling: C. & T. (Pyrok Contracts) Ltd. Balcony Balustrade: J. Starkie Gardner Ltd. Bar Fittings: Gaskell & Chambers Ltd. Bricks: Henry J. Greenham (1929) Ltd. Richard Parton (Builders' Merchants) Ltd. Cellulose Spraying: R. Fox & Sons. Communication Tubes: Lamson Engineering Co. Ltd. Cooking Equipment: Benham & Sons Ltd. Cork Insulation: Cork Insulation & Asbestos Co. Ltd. Cork Tile Flooring: Armstrong Cork Co. Ltd. Counters and Fittings: Falkus Bros. Ltd. Decorations: Heal's Contracts Ltd. (Directors' Dining Room and Lounge), Maple & Co. Ltd. (Board Room), Catesby's Ltd. Dining Room (Managers), T. & W. Ide Ltd. Dome Rooflights. Entrance Hall Doors: J. Starkie Gardner Ltd. Excavation: Willment Bros. Ltd. Fire Shutters: Shutter Contractors Ltd. Flagpole: Piggott Bros. & Co. Ltd. Furniture: Heal's Contracts Ltd. (Reception area), Maple & Co. Ltd. (Board Room). Glazing: Faulkner Green & Co. Ltd. Handrails—Wooden: F. J. Lewis Ltd. Heating and Ventilation: Young Austen & Young Ltd. Hose Reels: The Pyrene Co. Ltd. Ironmongery: G. & S. Allgood Ltd. Kitchen Fittings (Caretaker's Flat): Built-in Fixtures Ltd. Lettering: The Lettering Centre. J. Starkie Gardner Ltd. (External) Lifts: Hammond & Champness Ltd. Lighting Fittings: Heffer & Co. Ltd. Lightning Conductors: W. J. Furse & Co. Ltd. Marble Wall and Column Facings and Mosaic Panels: J. Whitehead & Sons Ltd. Neon Sign: Claude General Neon Lights Limited. Panels—Metal: Charwood Safe & Engineering Co. Ltd. Partitions (Internal): Triplewoods Ltd. Pavement Lights: Lenscrete Ltd. Paving: Wm. Knight & Co. Ltd. Plastering: J. H. Jenner & Co. Ltd. Pressed Metal Skirting: The Morris Singer Co. Ltd. Quarzite Facing and Paving: John Stubbs (Marble & Quarzite) Limited. Racking: Acrow Engineers Ltd. Roller Shutter to Garage: Dennison Kett & Co. Ltd. Rails to Roof and Balcony: Kingsmill Metal Co. Ltd. Sanitary Fittings: John Bolding & Sons Ltd. Scaffolding: Palmer's Travelling Cradle & Scaffold Co. Ltd. Slate Surrounds: John Stubbs (Marble & Quarzite) Ltd. Sprinkler Installation: Independent Sprinklers Ltd. Stair Balustrades: S.W. Farmer & Sons Ltd. Telephone System (Internal) E. Shipton & Co. Ltd. Terrazzo Paving: Art Pavements & Decorations Ltd. Tiling—Floor and Wall: Carter & Co. Ltd. Venetian Blinds: The Crittall Manufacturing Co. Ltd. Windows—Metal: The Crittall Manufacturing Co. Ltd. Wood Block Flooring: The Acme Flooring & Paving Co., (1904) Ltd.



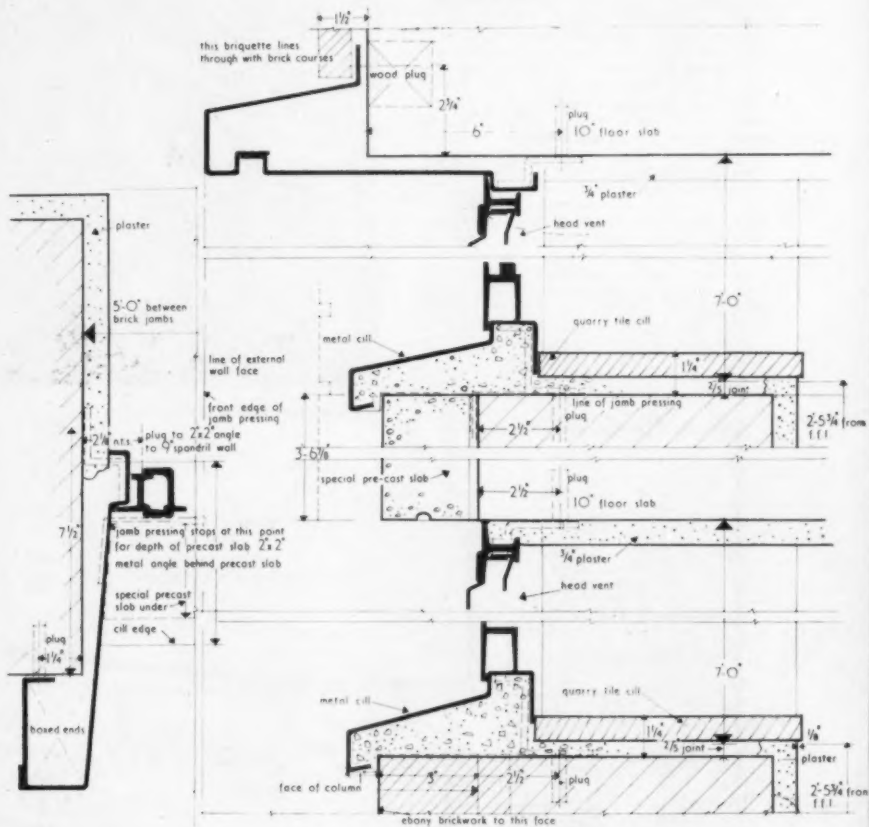
Coffee lounge on 7th floor



Directors' dining room and lounge



### PLAN AND SECTIONS THROUGH WINDOW





## Gateway House

headquarters at Aldgate House, which is now the main stores depot cope with the orders and invoices by a direct line and these are sent via the tubes to the requisite offices.

Messages and inter-office memos are also dealt with in this manner.

### Finishes and details

The exterior is faced with 2in ebony coloured and buff coloured bricks and at the window head the reveal is formed by a special brick that is L shape in section.

On the top floor the lift motor room is faced with pale grey quartzite from the Brocco mountain area in Italy.

Inside the main foyer is the original foundation stone of the City Gateway of Aldgate that was salvaged from the rubble after the bombing and this has been embedded in the wall.

The columns on the ground floor are faced with black Portoro marble with a gold vein and the walls have a grey-green Cipollino marble finish.

### External appearance

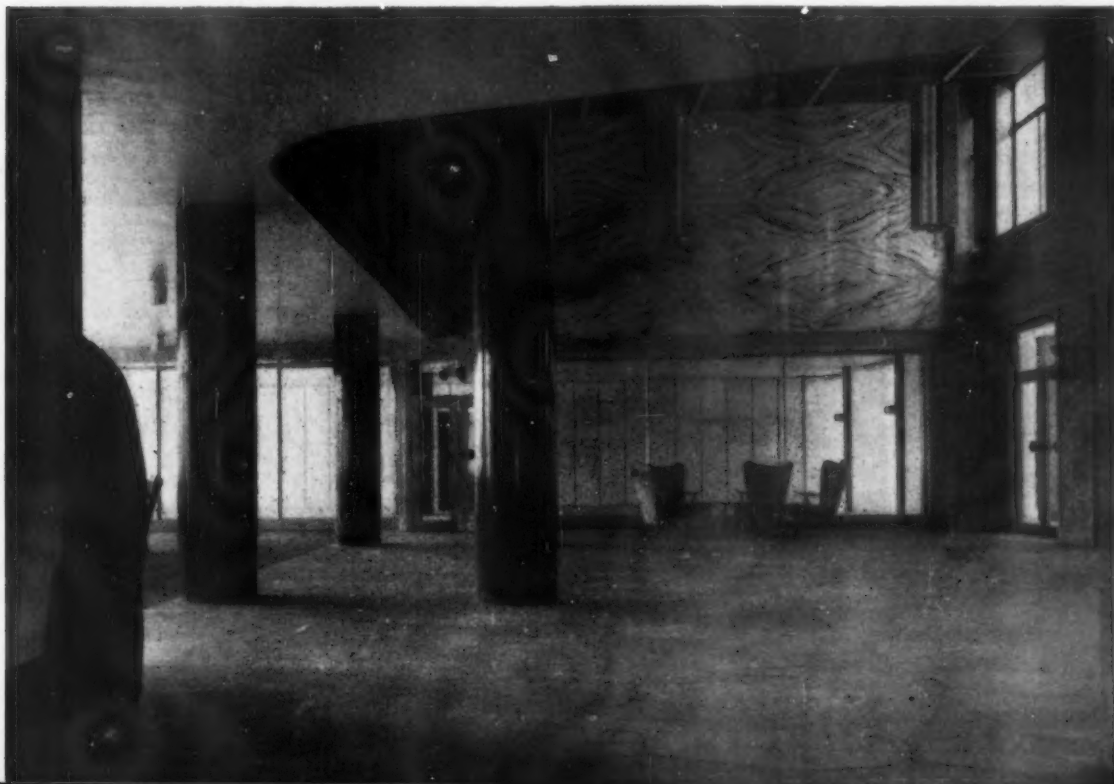
Each of the windows facing Cannon Street are flood-lit from the inside and the building can be illuminated at night.

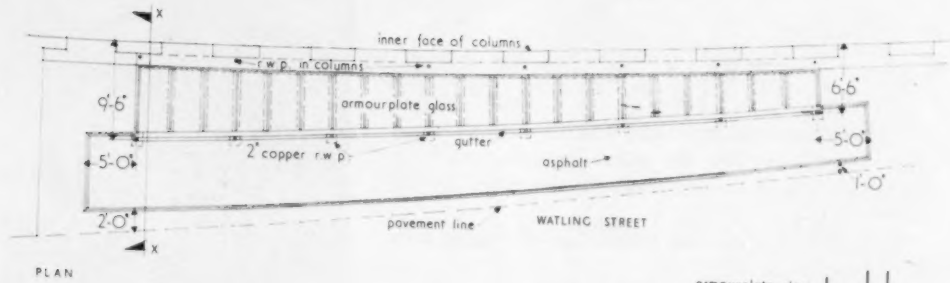
The window surrounds generally are pressed metal as are the cills.

The mosaic panels on the Cannon Street elevation were made as one panel before erection, and then lifted into place. Holding these panels are G.I. bolts set into the concrete backing.



*Looking down on the entrance foyer from the mezzanine level and a view towards Friday Street in the background of the lower photo*

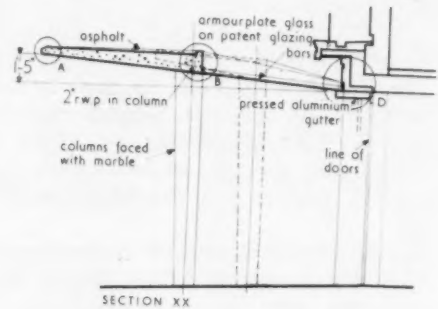




PLAN



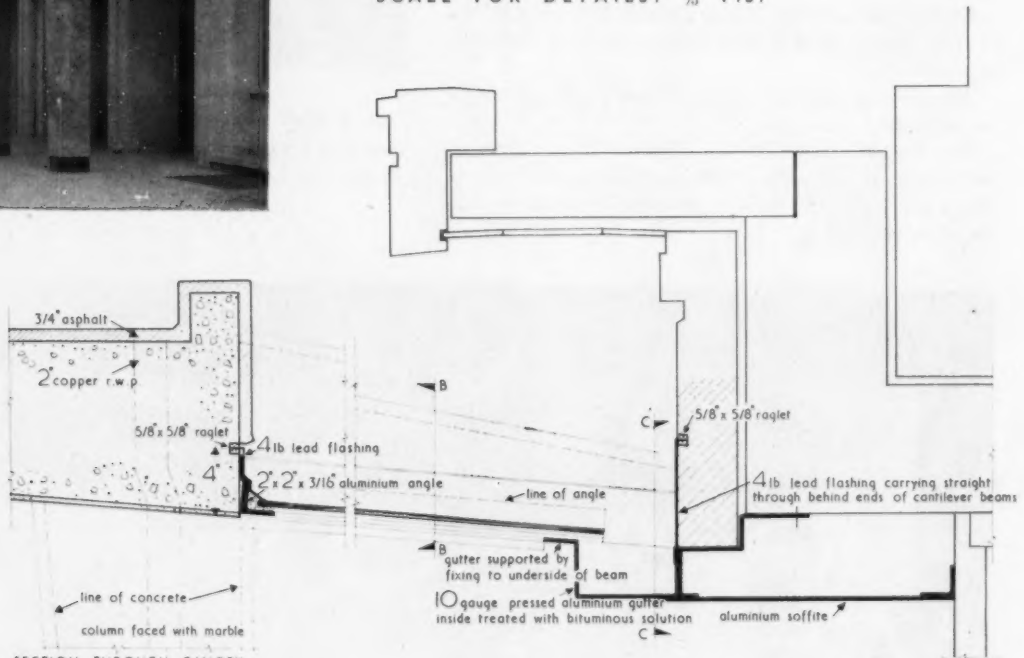
## Gateway House



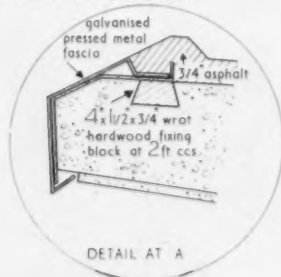
SECTION XX

THE PROJECTING CANOPY OVER MAIN  
ENTRANCE OFF WATLING STREET

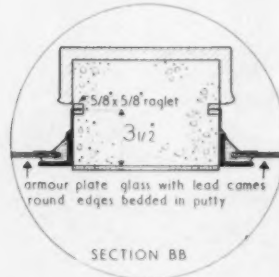
SCALE FOR DETAILS:  $\frac{1}{8}$  F.S.



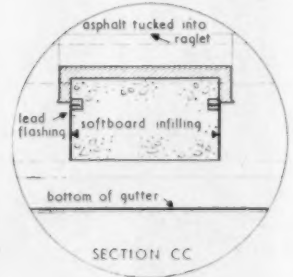
SECTION THROUGH CANOPY



DETAIL AT A

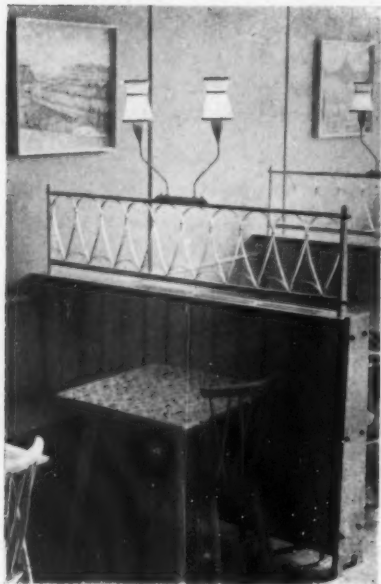


SECTION BB



SECTION CC

One of the table tops. They are all surfaced with "Klingdecor"—an asbestos fibre sheet impregnated with the plastic melamine. These tops are heat resistant and have patterned squares of thin material pressed beneath an upper laminate which is transparent so that the design is visible yet the material is protected by a durable finish.



## Le Chalet

Interior design by E. TOBLER

WITH the opening of this coffee house at York Street, Twickenham the espresso movement spreads gradually outwards from its stronghold in the West End. This lounge is inside premises that were originally offices and the overall design has leaned towards an approach reminiscent of a coffee lounge or cafe in Switzerland. Over the counter the ceiling was lowered to induce the impression of an alcove in the room. It is boarded with pine planking. Ash boards are on the wall and make up the counter and running between the counter and the ceiling is a carved wooden post supporting a brass and turned wood, light fitting. Breaking up the room are low partitions of polished ash boarding which have at the base radiant heating tubes. The warm air outlet grilles are slotted into the top board.





Entrance front

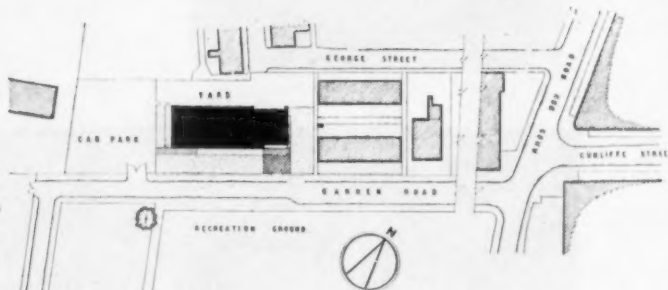
## OFFICE BLOCK

## WREXHAM

**For Rogers Jackson Ltd.**

architects:

LEONARD MULTON, F.R.I.B.A.



BLOCK PLAN

**T**HE clients are large suppliers of builders' merchants' materials in the North Wales area. They required a modern office block to accommodate the whole of their clerical and sales staff. Facility for serving light meals was to be provided. The building was to be no more than two storeys, and capable of extension.

### Site

The site is level, in a cul-de-sac, with a frontage having a southerly aspect. It faces a small park on the outskirts of the town.

### Solution

The solution to the client's problem called for a simple straightforward rectangular main block, divided

by a central corridor on each floor, giving access to offices, cloakrooms and canteen. Attached to the main block at the west end is a smaller unit consisting of the entrance foyer, waiting room, strong room and boiler house, and a main staircase leading to a first floor board room and central access corridor to offices.

The eastern end of the main block is left free from all planning restrictions, to allow for extension. The subsidiary staircase at this end is prefabricated and capable of being removed and being re-erected in the extension when this takes place.

The planning of the office accommodation provides for a double row of desks with ample space between them. A large amount of filing space was required; and the whole of the dividing wall to the corridor is



used for this purpose. The corridors are naturally lit by clerestory lighting above the filing shelves.

Offices with a southerly aspect are provided with venetian blinds, gear controlled, and designed as part of the structure. These blinds are concealed from view when fully raised.

The equipment and planning of the cloakroom accommodation were designed to illustrate good plumbing practice and sanitary fitting layout. All piping to fittings is concealed in wall chases or pipe ducts made accessible for maintenance. The w.c. divisions are pre-cast terrazzo.

#### Construction

The main block is steel framed, clad with cavity brickwork. The subsidiary block forming the entrance foyer, etc., is in load bearing 11in brickwork, partly faced with random coursed squared local lime-stone.

The first floor is of hollow tile construction; the roof is timber joisted between the steel lateral beams, boarded and asphalted. Corridor walls are 4½in hollow clay tiles.

The windows throughout are purpose-made rust proofed steel. Pressed sheet metal mullions encase the outer flange of the steel stanchions.

#### Special features

The structural steel stanchions and perimeter beams are encased within the cladding walls, and no projections occur inside or outside the building. The tie beams at first floor level are concealed within the structural floor thickness.

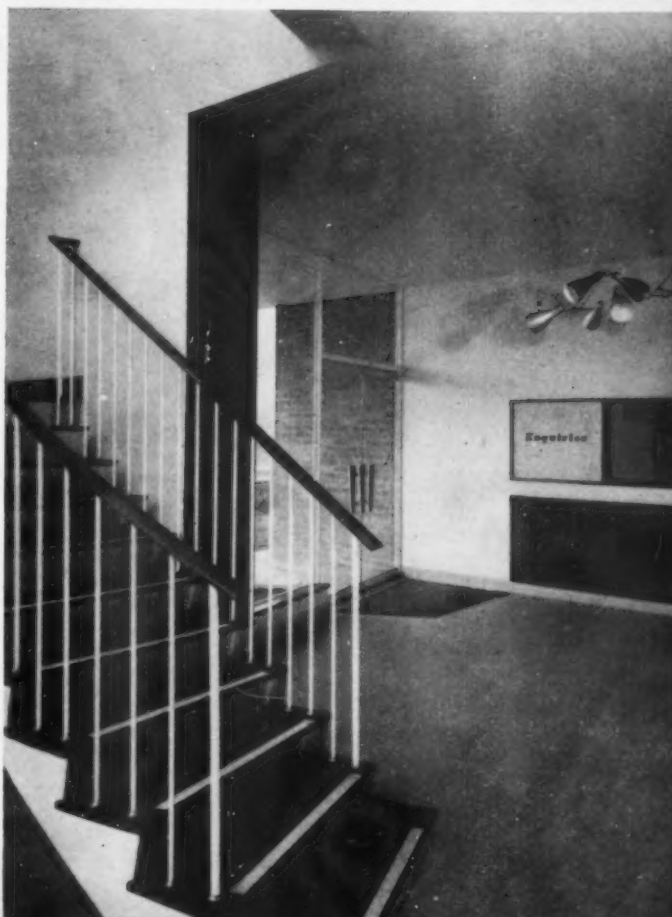
The structural steelwork forming the flat roof has been designed so that no beams show below ceiling level, and this has been achieved without the necessity of a false ceiling. Continuous beams extending the full width of the building are used to reduce their depth to a minimum.

Heating pipes are concealed within floor ducts at ground floor level. At first floor level the stanchions are provided with slotted holes to take the flow and return pipes to the first floor radiators. The pipes, which are insulated, are completely concealed by removable fascias, allowing access to the pipes if necessary.

A portion of the ground floor is set aside as a machine room for mechanical accountancy. This has been sound-proofed by means of cavity wall construction, with wall ties omitted. The inner leaf consists of hollow tiles completely separated from the main structure by insulating material at all abutments.

The main staircase is constructed of *in situ* reinforced concrete, the treads are in 1½in teak with an inset strip of Ferodo across the full width by the nosing. Risers are faced with anodised aluminium sheet metal. The

*The entrance foyer with a view of the main staircase*



## Office Building, Wrexham

sides and soffit of the stair flights are plastered. The balustrade is constructed of rust proofed, white stove enamelled mild steel balusters, with a hand rail in polished teak. Brass collars cover the joint between each baluster and tread.

Natural ventilation to all offices is provided by horizontally pivoted opening lights operated by Arens cable control.

### Finishes

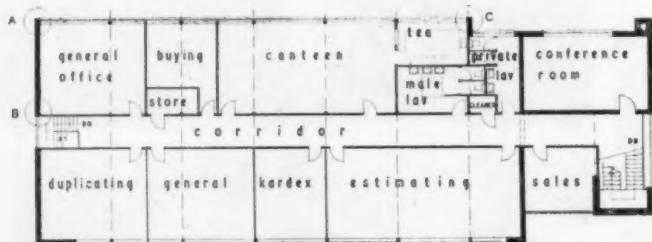
Floors—All offices and corridors: Wood block. Cloakrooms and canteen kitchen: Terrazzo pre-cast tiles. Entrance foyer: Terrazzo pre-cast tiles. Plastering: This has been executed in 'Carlite' plaster, which has improved insulation and acoustic properties, compared with normal hard wall plaster. Heating: This is a low pressure hot water system, operated by a gas-fired boiler. Wall type radiators are used throughout. Where radiators are beneath windows, the cill board is extended to act as a shelf. Artificial lighting: All offices are lit with suspended fluorescent tube fittings, giving an even distribution of lighting, positioned to give a symmetrical appearance from outside. Corridor lighting is provided by filament lamps housed in spun

metal reflectors. The entrance foyer is lit by similar means, with the fittings designed as decorative features. Telephones: G.P.O. telephone and internal telephone wiring is housed in a specially designed skirting. Socket outlets are provided in the skirting so that telephones may be plugged in where necessary. Power wiring socket outlets are also provided in the same skirting to serve office machinery. Decorations: Considerable use has been made of colour throughout the building, both internally and externally.

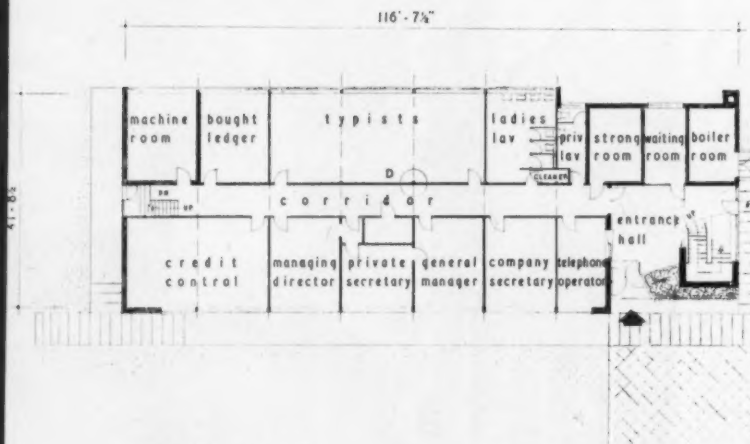
General contractor:

Alun Edwards Ltd.

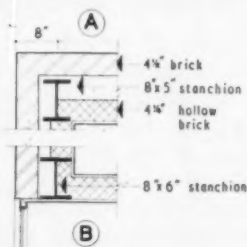
Asphalting: Birmingham Asphalt & Paving Co. Ltd. Armour Plate and Armourcast Doors: Pilkington Bros. Balustrades: Craftmetals Ltd. Boiler—Gas Fired: Ideal Boilers & Radiators Ltd. Bricks—Facing: Blockleys Ltd. Desks: Leabank Office Equipment Ltd. Display Lettering: Ward & Co. Electrical Installation: Thorntons of Wrexham. Flush Doors: Southern Ltd. Heating: Rogers & Jackson. Ironmongery: K. S. Neale Ltd. Lantern Lights and Glass Domes: Standard Patent Glazing Co. Ltd. Lighting Fittings: Best & Lloyd Ltd. Paint: Imperial Chemical Industries Ltd. Partitions—Glazed: Rubery Owen & Co. Ltd. (Industrial Storage Equipment Division). Pavings (External): John Ellis & Son Ltd. Plaster ('Carlite Patent'): Gotham Co. Ltd. Prefabricated Staircase: H. E. Breaker (Metalwork) Ltd. Reconstructed Stonework: Empire Stone Co. Ltd. Sanitary Goods: Rogers & Jackson Ltd. Sculptured Panel: College of Arts & Crafts under the direction of W. Bloye, F.R.B.S. Birmingham. Strong Room Door: Chatwood Safe & Engineering Co. Ltd. Structural Steel work: Rubery Owen & Co. Ltd. Suspended Floor and Staircase: Kleins Co. Ltd. Terrazzo Floors and Partitions: Marbolino Co. Ltd. Thermoplastic Floor Tiles: Marlet Tile Co. Ltd. Tiles—Coloured External: Shaws Glazed Brick Co. Ltd. Venetian Blinds: Crittall Manufacturing Co. Ltd. Wallpapers: John Line & Sons Ltd. Windows & Gearing: John Gibbs Ltd. Wood Block Floors: Hollis Bros. Ltd.



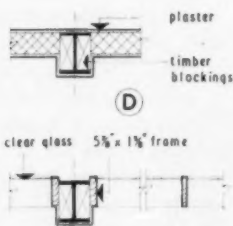
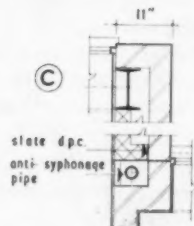
FIRST FLOOR

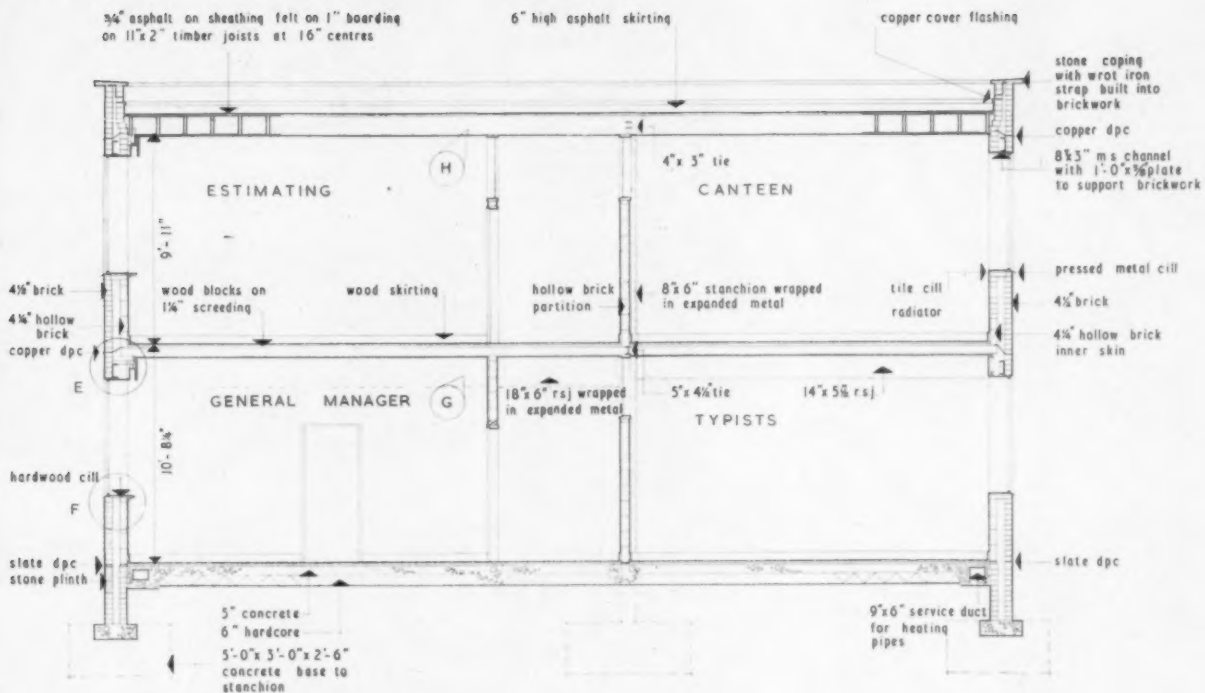


GROUND FLOOR



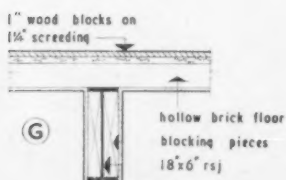
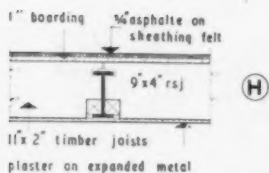
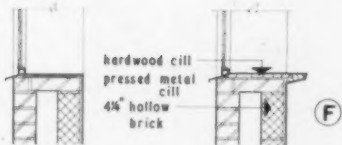
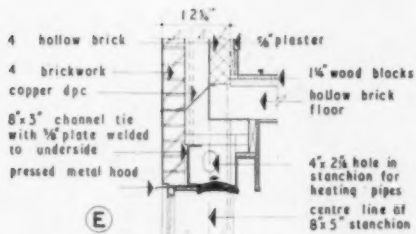
PLAN DETAILS  
ON THIS PAGE.  
SECTION DETAILS  
OPPOSITE.  
SCALE: 1/16 F.S.





SECTION THROUGH BUILDING  
SCALE: 8 FT TO 1 IN

*The canteen and typing pool.*





## Lightweight Concrete Blocks

THE value of lightweight concrete blocks both for load bearing and non-load bearing purposes is still only slowly being appreciated as it continues to be necessary to overcome many prejudices against their use; these prejudices are current mainly for the reason that there is an idea, which is widely held by laymen as well as many builders, that they are a second-rate building material and far inferior to dense concrete blocks and to bricks. It is unfortunate that those who hold this view are not more willing to appreciate fully the advantages to be gained by the use of lightweight blocks as a means of improved thermal insulation and of reducing handling and transport costs, which result from the less weight of the blocks for a given wall area. There is no doubt that there is real benefit in the use of these blocks to the building industry.

The lightweight blocks can be made with ample strength for load-bearing purposes, such as the internal leaf of external cavity walls, or for load-bearing partitions for a great many applications. For these load-bearing purposes a compressive strength of not less than 400 lb/sq in is needed and this can be achieved without destroying the insulation value. It should also be borne in mind that the British Standard defines these compressive strength requirements as a minimum for the average test results of 12 blocks, but it does permit individual blocks to fall below this figure so long as the test result is not below 300 lb/sq in.

It is perhaps rather unfortunate that it is so easy to make concrete blocks with both dense and lightweight aggregate. This facility seems to have resulted in far too many people buying a block making machine, some aggregate and cement and starting in business as block makers but without having the very essential knowledge of what is required of a concrete block to avoid trouble and without having the equipment necessary to check that their raw materials, their mixes and their ultimate products are such that they produce blocks of suitable quality. There certainly are large quantities of blocks of poor quality which relatively quickly become a source of failure of finishes such as plaster and decoration on account of

cracking, due to drying shrinkage and moisture movement. It is my belief that it is of the utmost importance to buy concrete blocks only from reputable producers who have proper control of their products from start to finish and including the facilities for the proper storage and transport of the blocks.

This lightweight type of block is so often called "breeze block," but today few, if any, are made from breeze and it is as well that they are not as it is important to use materials which do not have serious losses when tested for combustible content and do not contain material likely to cause ultimate difficulties. Very many lightweight blocks are made from clinker, which is a very variable waste material and consequently needs constant testing to ensure that the harmful ingredients are within limits, as given in B.S.1165, which will make sure that when made up into blocks there should be no undue trouble resulting from their use. B.S.1165 sets out both limits and tests and it is wise, when buying clinker blocks, to make quite sure that the suppliers can show that they test their clinker frequently and constantly to this B.S. on account of the variability of the raw material. The important factors to watch are that the soluble sulphate does not exceed the limit given in the B.S. and that the percentage loss in the ignition test does not exceed 20 per cent. for load bearing blocks (type B) and 30 per cent. for non-load bearing blocks (type C). There are some people who believe that the limits in this B.S. for the loss on ignition are unnecessarily low and that a higher limit could be allowed and still ensure the production of blocks which are safe to use. It is believed that much of the clinker available today has a high percentage of combustible material although some very reputable block makers remain convinced that no trouble arises if this is a little greater than the B.S. limit. Personally, I remain to be convinced and if the makers' test results are unlikely to be within the B.S. limits I prefer to adopt other aggregates, even if these make the blocks more costly.

Of the aggregates alternative to clinker for block making there is foam slag, expanded slate, shale and clay, vermiculite and natural pumice. There are considerable quantities of foam slag and expanded perlite available, both of which are home produced materials. There are also in fairly large quantities of vermiculite and pumice, but both of these are imported. Foam slag has a density about the same as pumice but the resulting concrete tends to be rather more dense. Perlite is only very slightly more dense than vermiculite and both are far less dense than the other materials and the perlite produces

blocks with a high compressive strength. Requirements for the quality of foam slag are given in B.S. 877 but, at least for the present, there are no British Standards for the other alternative materials.

Lightweight concrete blocks, regardless of the aggregate used since a wide range is provided for, should comply with the requirements of B.S.2028 and even when the blocks are not, for some reason, of the sizes and shapes given in the B.S. the tests given should still be applied. As these lightweight blocks are very often used more or less independently of brickwork there seems no reason why their sizes should not vary from those given in B.S.2028, which are directly related to brickwork, when the lightest types of aggregate are used. The B.S. sizes are based on a nominal 18in. length with heights to conform to the needs of three courses of bricks in the two common sizes but it would seem possible to increase, without undue difficulty in handling, the sizes up to at least 24in long and 12in high, the thicknesses, of course, remaining as set out in the B.S., namely, 3in 4in 4½in 6in or 8½in for load bearing purposes and 2in 2½in for non-load bearing purposes. These larger blocks are still handleable by one man and, as all blocks, need both hands to lift them into place.

The important factors to be borne in mind when using these blocks, which the B.R.S. have frequently stressed but unfortunately still seem often to be forgotten, are not only to see that the quality of the blocks is suitable and complies with the test requirements in the British Standards both for the aggregates and for the blocks themselves when made, but also the use of suitable mixes for mortar, rendering and plaster used with the blocks. There is always a tendency on the part of operatives, for some inexplicable reason, to use mixes which are too strong and consequently likely to cause cracking: weak mortar is essential and should, for normal purposes, be cement, lime and sand mixed in the proportions by volume of 1:2:9. A similar mixture for plaster undercoats is also satisfactory if a small amount of gypsum plaster is added. The B.R.S. has also stressed the need to protect blocks during transit and to stock them carefully under cover on the job so that they do not become saturated with rainwater. The B.R.S. issued a very complete Digest, No. 52, on the use of these blocks for housing purposes and the M.O.W. have recently issued Advisory Leaflet No. 38 which deals both with lightweight blocks and the use of lightweight concrete for roof screeding. Both these publications stress the importance of not applying plaster and rendering to damp blocks until they have thoroughly dried out.

DUTCH UNCLE



## Industrial Notes

● British Plimber Limited, manufacturers of Plimberite, the resin-bonded wood chipboard, announce the appointment of Mr. Alan Watson as their Technical Representative for South Wales. His address is 18 Walter Road, Swansea. Mr. Watson takes over from Mr. Frank Lennon, who will continue to cover South and South-West England for British Plimber Limited.

● Dunlop Group sales to the public last year reached a record, £219,000,000, a rise of 15 per cent. over 1954, and the estimated increase in the volume of goods sold was 6 per cent. Aggregate sales, including supplies within the group, rose from £262,000,000 to £302,000,000. Selling prices were not sufficiently increased to offset the increase in raw material and other costs, and the margin of profit, as a percentage of sales, fell from 6.2 per cent. in 1954 to 5.3 per cent. after all charges except tax.

● The 600 Group of Companies will be exhibiting on no less than six stands at the 1956 International Machine Tool Exhibition to be held at Olympia from 22nd June to 6th July. The machines on show will be representative both of those actually manufactured by companies within the Group and of the very wide range of British, American and Continental machines for which the Group act as distributors in the United Kingdom.

● The Ruberoid Co. Ltd. (11-19 New Oxford Street, London, W.C.1) announce that Col. R. P. W. Adeane has joined the board of the company. Col. Adeane is also chairman of Cochran & Co., Annan Ltd., and a director of Ransomes & Rapier Ltd. and Consolidated Trust Ltd.

● The largest single overseas order for domestic electric cookers during recent years has been placed by Singapore City Council with The General Electric Co. Ltd. Valued at well over £1,000,000 it is for 5,000 cookers. Four thousand of these cookers will be standard British models, the other thousand will have hobs specially adapted to Eastern needs. It was on a tour of the Far East that Mr. Leslie Gamage, Vice-Chairman and Joint Managing Director of the G.E.C., noted Asia's special requirements for domestic electrical equipment. Hence, the development by G.E.C. of the Kwali cooker which is produced as a standard European cooker, giving economic benefits of mass production, but with a hob conforming to Eastern needs.

● Thomas De La Rue & Company have formed an Australian subsidiary Company to manufacture Decorative Laminated Plastics in a new factory, situated near Sydney. Since the end of the war the Company has done considerable export trade with Australia in "Formica" laminates and other plastic products. The new Company will work in close association with Email Limited, whose subsidiary Company, Messrs. James Balfour & Co. (Pty.) Ltd., have acted as Sales Agents for "Formica" laminated plastics since 1947. The Company, which will have an authorised capital of £A1,000,000, is expected to commence production within two years. Mr. H. M. Bathurst, who has been with Email Ltd. in an executive capacity for many years, has been appointed General Manager of the new Company.

● Chamberlain Industries Limited, of Staffa Road, Leyton, London, E.10, have been appointed sole agents in England and Wales for the Jenbach Diesel-Driven Air Compressor.

● Due to the continued expansion of both divisions of Steelbracketing & Lathing Ltd. it has been decided to reconstitute the "Steelbrac" Steel Partitioning and Steel Equipment Division into a separate company, to be known as "Steelbrac" Ltd., to operate from 1st May from Willow Lane, Mitcham, Surrey, tel. Mitcham 4072/3/4. The Suspended Ceilings Division will retain the existing title of Steelbracketing and Lathing Ltd., and will operate from 3-8 Brigstock Parade, Thornton Heath, Surrey. Thornton Heath 3015.

● Mr. John R. Rylands, M.Sc., M.I.Mech.E., M.I.E.E., F.Inst.F., will succeed to the office of President of the Institute of Fuel in October next.

● Hanovia (Lamps Division of Engelhard Industries Ltd.) announce a modification to the retail price of their new Radisil infra-red domestic heater, due to purchase tax regulations. With immediate effect, purchase tax is payable on the complete unit, bringing the total retail price for the heater and element (irrespective of wattage) to £5 16s. (instead of £5 14s. 1d.). Elements sold subsequently as spares have been reduced in price from 15s. to 13s. 4d. retail (irrespective of wattage) and will not be subject to purchase tax.

● Polycell Products Ltd. announce that, following keen trade enquiries, they can supply Polyfilla in 56-lb. bulk packs. Terms, dependent on quantities, are obtainable from the firm at 84 Albert Street, London, N.W.1. Euston 4848.

● Reckitt & Colman Holdings Limited announce that their offers to acquire the 7½% and 5% Participating Cumulative Preference Stocks and the Ordinary Stock of Sissons Brothers & Co. Ltd. have been accepted by the holders of over 90% of each class of Stock. All conditions upon which the offers were made have been fulfilled and the offers have therefore become unconditional and binding.



Messrs. Cannon (G.A.) Ltd., gas appliance manufacturers, have recently opened a new showroom at 40, Easy Row, Birmingham. Designed by Montague Reed, M.S.I.A. the premises also provide a gas educational and cookery centre. There is a reception lounge for informal conferences, cinema-cum-demonstration theatre and basement training centre for operatives. Mr. Reed has made use of rich colour on plain surfaces with carefully placed lighting throughout.

## NEW PRODUCTS

The Supaslot Angle Co. (G.B.) Ltd., have added to their range of slotted angles with two items. One, a heavy industrial angle  $\frac{1}{2}$ in thick,  $1\frac{1}{2}$ in by  $1\frac{1}{2}$ in, the other, Supaslot minor, is the same size in 14 gauge. Fig. 6.

★

A permanent heavy-duty flooring, Mettaflor Fig. 3, consists of square cast-iron plates with a striated upper surface and ribbed underside. Vent holes prevent air being trapped during laying. By W. T. Henley's Telegraph Works Co. Ltd.

★

The model HB by the Hotpoint Electric Appliance Co. Ltd., Fig 4, has been designed for the smaller kitchen, size  $17\frac{1}{2}$ in wide by 18in by 29in, it is available in white or cream. Heats the water. Capacity, 5lb dry clothes.

★

E. K. Cole Ltd., produce a thermal storage heater, Fig. 2, which is available with  $1\frac{1}{2}$  or  $2\frac{1}{2}$  kW loadings. The sloping top of the case prevents it being used as a shelf and possibly causing overheating.

★

The Fordham Panel Type Cistern has been re-designed, Fig. 7, by Fordham Pressings Ltd. It is available with foot operation and in colour.

★

An oil burner weighing 60lb which can be fitted to most boilers is now being produced in this country by White's of Hebburn (Engineers) Ltd. Fig. 5. Known as the Firepak, it incorporates a photo-electric cell safety device for flame failure.

★

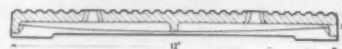
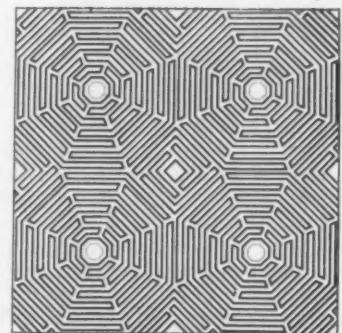
The Kieft fully automatic oil fired boiler, Fig. 1, is available in two finishes, grey mottle and light cream. Made by Cyril Kieft & Co. Ltd., it is fitted with the 9Cl self-lighting oil burner. Output 65,000 B.Th.U.s.

★

Lacrinoid Products Ltd. announce the addition of pastel colours to their range of door furniture.

★

The Marley Tile Co. Ltd. has introduced a plastic handrail in Vinyl plastic. It is applied over wood or metal cores. Available in six colours. A new Marley 'G' type clear span building in precast reinforced concrete has been designed in accordance with the requirements of the B.S. Code of Practice C.P.114, for industrial use. From Marley Concrete Ltd.



4

1

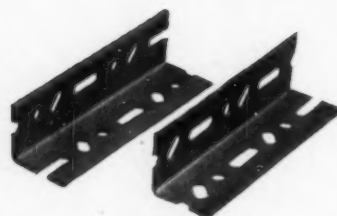
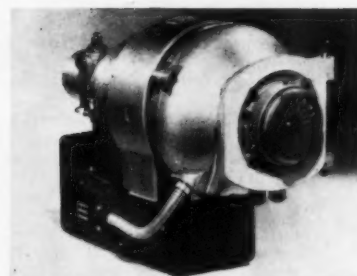
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# CURRENT MARKET PRICES (LONDON)

(These prices apply to material purchased in the quantities named or otherwise as might be expected)  
for a new building of moderate size.

May, 1956

## AGGREGATES AND SAND

1½ inch—all in—ballast	24/-	Yard cube
1 inch do. do.	26/-	delivered
1 inch screened shingle	21/9	(in five yard
1 inch do. do.	22/9	loads or
1 inch granite chippings	52/-	more)
Sharp washed sand	24/9	
Pit sand	22/6	
Building sand	22/6	
Broken brick	20/3	
1½ inch shingle	20/9	
Cartage of muck	8/6	

## BUILDING MATERIALS AS DESCRIBED, CENTRAL LONDON

CEMENTS packed in paper bags	Per ton
Portland in 6 ton lots	101/6
Do., from 1 ton to 5 tons 19 cwt. do.	113/6
Do., Rapid hardening (6 ton lots)	112/-
Do. (but 1 ton to 5 ton 19 cwt.)	124/-
Cement "Aquacrete" (do.)	146/-
Do., "417" or "Polar" (do.)	146/-
Do., "White" 1 ton (lots)	262/-

LIME—	132/-	(1 ton loads)	deliv'd
Hydrated	129/6	(2/3 do.)	do.
and	119/6	(4/5 do.)	do.
Ground	117/6	(6 do.)	do.

PLASTER—	
Keenes, coarse, pink (2 ton lots)	206/3 ton
Do. do. white (do.)	212/3 do.
Sirapite, do. (2 ton to 3 ton 19 cwt lots)	150/- do.
Do. finish (do.)	158/- do.
Hardwall, do (do.)	161/6 do.
Plaster, coarse, pink (do.)	147/9 do.
Do. do. white (do.)	156/- do.
½ in Plaster baseboard (25 to 75 yards)	3/- Yard Sup.
½ in Do. (150 to 299 yards)	2/8 do.
¾ in Jute scrim (100 yd roll)	8/10 each
Cow hair (under 3 cwt)	97/6 cwt

FIRECLAY—	
Stourbridge, loose (1 ton lots)	176/9 ton delivered
Fire cement	12/3 14 lb

## BRICKS

BACKING BRICKS (in truck loads)—	
Flettons	113/- per 1,000 delivered
Do. Keyed	115/- do.
Do. bullnose	133/- do.
Blue wirecuts	510/6 do.
White	192/- do.
Southwater engineering (No. 1)	379/- do.
Firebricks—2½ inch	77/- per 100 delivered
Do. —3 inch	90/9 do.

STOCK BRICKS—	
Mild stocks	181/6 per 1,000 at Works
Second, do.	216/- do.
First, do.	237/- do.
Add for delivery—approx. 45/-	per 1,000 in lorry loads

FACINGS (ex truck or lorry)—	
Rustics	138/- per 1,000 delivered
White	210/- do.
Blue pressed, 2½ in	562/- do.
Do. bullnose	576/- do.
Reds (Multi sand faced)	310/- do.
White glazed stretchers	1504/- do.
Do. headers	1480/6 do.
Do. bullnose	1880/- do.
Do. double stretchers	1997/6 do.
Do. double headers	1821/3 do.
Breeze fixing bricks	29/- per 100
Fire tiles and lumps	33/- foot cube
Wall ties—8" × ¾" × ⅜", black	71/3 per cwt
Cement mortar (1 : 3) hand-made	92/- yard cube

## BRICKLAYERS' SUNDRIES—

AIR BRICKS	9 × 3in	9 × 6in	9 × 9in	12 × 9in
Iron	each 2/1	3/5	5/2	6/10
Galvanized do.	do. 3/9	6/-	9/-	12/-
Terra Cotta	do. 1/3	2/7	5/6	10/10
Chimney pots, Terra	1ft	2ft	3ft	4ft
Cotta (11 to 25)	do. 7/3	12/8	28/9	49/9

## PARTITIONS—

18in × 9in Blocks keyed for plastering				
Per yard super in 6 ton lots	2in	2½ in	3in	
In solid clinker including any half blocks	3/9	4/4	5/3	
In cellular clinker blocks	3/11	4/7	5/3	
In hollow clay blocks	4/4	4/7	5/4	
Clinker blocks in small quantity	5/7	6/7	7/11	
Intermediate quantities in all types may be had at intermediate prices.				
Smooth in lieu of keyed faces extra cost per side 3d. per yd super				

## SINKS—

Fireclay white glazed in and out—standard quality			
	24 × 18in	30 × 18in	30 × 20in
London pattern, no overflow, 6in deep	69/6	86/6	96/-
Belfast, plain edge, 10in deep	83/3	137/6	185/6

## FLUE, LININGS, PLAIN, CIRCULAR (FIRECLAY)—

	Foot lineal	Each
	Straight	Bends
9in diameter	3/11	11/9
10in do.	4/11	14/9
12in do.	9/5	28/3
9in diameter, beaded end, 12in high		5/4

## FLUE PIPES AND FITTINGS—

	4in	5in	6in
Heavy asbestos type, 6ft length	16/6	22/-	28/-
Do. 3ft length	8/3	11/-	14/-
Do. bends	6/2	7/10	9/4
Light asbestos type, 6ft length	13/6	17/-	22/-
Do. 3ft length	6/9	8/6	11/-
Bends	4/10	6/1	7/5
Baffler	13/4	15/10	16/8

## DRAINAGE GOODS

### GLAZED STONEWARE STANDARD LIST

	4in	6in	9in
ORDINARY TYPE—EACH			
Pipes in 2 feet lengths	1/8	2/6	4/6
Bends	2/6	3/9	10/1½
Junctions (4in on 4in, 6in on 6in, 9in on 9in)	4/2	6/3	13/6
Gullies with 4in outlets	6/3	6/10½	11/3
4in horizontal inlets	2/-	3/-	5/-
4in vertical ditto	3/-	4/-	7/-
Black iron grids	9d	1/5	2/9

### Adjustment to Current Cost

	2 ton lots or more	100 pieces or more	Under 100 pieces
"Best" pipes and fittings. Percentages to add	85%	117½%	130%
Further percentages to be independently added in respect of:			
British Standard pipes, etc., 10. "Best" Tested pipes, 37½.			
British Standard Tested, 47½.			

## IRON DRAINAGE GOODS—

Each	4in	6in
Cast iron pipes, 9 feet long	73/3	108/-
Do. 6 feet do.	52/8	82/-
Do. 4 feet do.	40/8	63/6
Do. 2 feet do.	24/10	37/8
Short bend	17/1	45/3
Junction	30/3	63/3

# CURRENT MARKET PRICES (Continued)

## DRAINAGE GOODS—Continued

GULLEY PARTS—		4in	6in
Traps, high level, invert	.. ..	30/3	82/- each
Inlet, bellmouth pattern	.. ..	16/-	31/11 do.
Do. with one vertical branch	.. ..	27/10	52/3 do.
Do. with two do.	.. ..	75/5	109/9 do.
Extra for Sealed cover	.. ..	9/8	12/5 do.

RAINWATER SHOES		4in	6in
With vertical inlet and rebated top	.. ..	39/8	79/- each
Extension piece, 6in high	.. ..	20/11	20/11 do.
Flat loose coated grating	.. ..	4/2	4/2 do.
Loose solid coated cover	.. ..	5/6	5/6 do.

## MANHOLE CHANNELS, WHITE GLAZED—

Each		4in	6in	9in
Straight, 2 feet long	.. ..	16/6	24/3	40/9
Taper, ditto	.. ..	27/6	27/6	41/9
Bends, main, half section	.. ..	32/-	46/3	76/-
Ditto, branch, ditto	.. ..	19/9	27/6	—
Ditto, ditto, three quarters, ditto	.. ..	27/6	44/-	—
Junctions, single	.. ..	26/6	46/3	—
Ditto, double	.. ..	36/3	62/9	—

## BROWN GLAZED CHANNELS—

Based on standard list (less than 100 pieces)

		4in	6in	9in
Half-round main channel (2ft long)	.. ..	2/9	4/2	7/4
Extra for stop ends	.. ..	2/9	4/2	7/4
Extra for outlets	.. ..	5/5	8/2	—
Channel bends with splayed ends	.. ..	8/2	12/3	—
Three-quarter section do.	.. ..	10/10	16/4	—

## MANHOLE COVERS—

		Black
24 × 18in Light foot traffic	.. ..	29/6 each
Do. Strong do.	.. ..	51/- do.
Do. Light car traffic	.. ..	105/- do.
Do. Road traffic	.. ..	160/- do.

## SUNDRIES—

		Galvanised
Manhole steps	.. ..	8/2 each
4in Mica valve fresh air inlets (L.C.C.)	.. ..	14/6 do.
Plumber's hemp	.. ..	7/3 per lb.
Gaskin, caulking	.. ..	1/5½ do.
Canvas backed hair felt, 4in wide	.. ..	9d per ft run

## ROOFING MATERIALS

### WELSH SLATES (delivered)—

Full Loads		Quantity 100 to 499	1 to 99
Sizes in inches	per 1,000	per 100	per doz.
22 × 11	2070/-	280/-	37/-
20 × 10	1839/-	250/6	33/-
18 × 10	1287/-	173/6	23/-
16 × 10	1020/-	138/-	18/3
14 × 10	670/-	95/9	12/9
14 × 4½	335/-	42/9	5/9

### TILES (Brosley and Staffordshire)—

		per 1,000	per 100
10½" × 6½" Machine made	.. ..	280/-	39/-
Do., hand made, sand faced	.. ..	350/-	46/9
Hips, valleys and angles	.. ..	31/- per dozen	—
Plain concrete tiles	.. ..	177/-	19/6

Sheeting asbestos corrugated, 6in pitch	.. ..	7/4½ yard super
4½in × 16 gauge, drive screws (galvanized)	.. ..	17/- gross
7½in × ½ hook bolts and nuts (do.)	.. ..	51/6 do.
Washers, round, flat galvanized	.. ..	4/9 do.
Do. do. bituminous	.. ..	2/- do.

## ROOFING FELT—

		1/- Yard Super
Sanded bitumen felt (55lb)	.. ..	1/6 do.
Ditto, but 75lb in weight	.. ..	3/- do.
Inodorous felt, best quality	.. ..	2/4 do.
Ditto, second quality	.. ..	1/8 do.
Underlining	.. ..	1/8 do.
Sheathing	.. ..	2/- lb.
Galvanized felting nails	.. ..	—

## PRECAST CONCRETE LINTOLS—

1 : 2 : 4—½in material, finished with fair exposed faces, including all form-work, and one ½in diameter mild steel rod reinforcement to each 4½in in width.

Per foot lineal delivered to site

4½in × 6in	9in × 6in	9in × 9in	13½in × 9in	18in × 9in
4/-	6/-	7/8	9/6	11/6

## STONE

PER FOOT CUBE in random blocks not exceeding 20ft cube in each, free on rail London.

Monks Park 8/1½ St. Aldhelm 9/1½

Portland brown Whitbed 8/5

Other stone but delivered to sites. Doultling 8/11, Beer 8/5

## TIMBER

Softwood—sawn—random lengths.

		Per Standard	Per cubic foot
Carcassing quality	.. ..	£105	12/8
Joinery quality	.. ..	£120 and up	13/4
Plain edged unsorted flooring, per square	.. ..	½in 90/-	1in 110/-
		1½in 138/-	1½in 165/-

½in insulating wall board (250 yards) 4/3 yard super  
Larger quantities cost less, and smaller quantities more.

## SUNDRIES—

		Dia.	3in	6in	9in
Black hexagon bolts, nuts and washers. Each	.. ..	½in 7d	10d	1/-	1/6
Sashline, hemp, good quality	.. ..	½in 11d	1/2	1/8	2/-
Per Yard Run	.. ..	½in 1/3	No. 6 9d	No. 8 1/1	No. 10 1/4
Floor brads	.. ..	.. ..	.. ..	71/-	per cwt
Cut Clasp Nails	.. ..	.. ..	.. ..	73/-	per cwt
Steel ordinary screws	1" No. 8 3/-	2" No. 8 5/2	.. ..	.. ..	per gross
Brass, ditto	Do. 10/8	Do. 18/9	.. ..	.. ..	.. ..

## HARDWOOD—

		Per ft	super	Per
Prime	.. ..	½in	1in	ft cube
African mahogany	.. ..	2/4	2/6	28/-
Honduras ditto	.. ..	3/3	4/-	50/-
Portuguese Guinea ditto	.. ..	3/1	3/3	36/-
African walnut	.. ..	2/5	2/7	29/-
Australian ditto	.. ..	5/6	5/10	65/-
English oak	.. ..	4/3	4/6	50/-
Yugoslavian ditto	.. ..	3/4	3/7	40/-
Burma and Siam Teak	.. ..	5/-	5/9	65/-

## DOORS.—STANDARD TYPE SOFTWOOD

Each in quantities 12 or more.

1½in finish, 4 horizontal panels moulded both sides 6ft 6in high.  
2' 3" wide 41/-  
2' 6" do. 42/3  
2' 9" do. 44/6

FLUSH DOORS, 1½in thick, 2in (nominal) as last but upper ply faced both sides, lipped edge.  
2' 6" wide 59/-  
2' 9" do. 62/-  
All 6ft 6in high.  
2' 3" wide 47/6  
2' 6" do. 49/6

PANELLED DOORS :  
see B.S. 459—Part 1.

FLUSH DOORS :  
see B.S. 459—Part 2.

2in (ditto) all as above but in 3 panels.  
2' 6" wide 55/9  
2' 9" do. 58/3  
2in (ditto) all as above but in 2 panels.  
2' 6" wide 51/3  
2' 9" do. 53/6

## IRONMONGERY

		2in	3in	4in	5in	6in
Cast iron Butts, per pair	.. ..	1/2	2/-	3/2	5/11	8/5
Hinges, spring, single action regulating, japanned, each	.. ..	—	8/-	12/-	15/3	21/-
Do. but double action spring only, each	.. ..	—	16/6	21/-	25/9	33/9
Do. blank only, each	.. ..	—	8/9	12/-	17/9	21/6



**CURRENT MARKET PRICES (Continued)****IRONMONGERY—Continued**

	12in	18in	24in	30in	36in
Tee hinges, (japanned)					
per pair ..	2/-	3/10	—	—	—
Do. but stronger, per pair ..	3/4	6/1	8/3	—	—
Hook and Ride hinges, per pair ..	—	—	13/4	16/3	24/10
<b>BOLTS</b> —each—	3in	4in	6in	8in	10in 12in
Cabinet, barrel, straight or necked ..	1/4	1/7	2/1	—	—
Square spring, with brass knob ..	1/4	1/7	2/1	—	—
Tower bolts ..	—	1/8	2/5	3/3	4/- 4/10
Barrel bolts ..	—	2/9	3/11	5/2	6/7 8/1
Add to Tower or Barrel bolts if necked ..	—	1/4d	3/4d	1d	1d 1d
<b>LOCKS</b> —each—					
Rim lock, 2 lever, wrot case brass bolt and bushing	12/9	—	—	—	3/9 3/3
or Bakelite do.	—	—	—	—	2/4
Bakelite finger-plates	—	—	—	—	8/9
Brass furniture ..	—	—	—	—	3/10
or Bakelite do.	—	—	—	—	16/-
Mortice lock, 2 lever, bushed	12/9	—	—	—	5/-
Cylinder latches, japanned case	—	—	—	—	1/6
Brass sash fastener ..	—	—	—	—	2/-
Case fasteners (malleable) ..	—	—	—	—	5/4
Do. stays (do.) ..	—	—	—	—	6/8
Axle pulleys (brass face, iron wheel)	—	—	—	—	1/-
Do. as last, but with brass wheel, 1 1/2in	—	—	—	—	—
Sash line, No. 8 Anchor yellow label	—	—	—	—	—

**METAL GOODS**

British rolled steel joists ex mills to basis sections on site (6in x 5in, 8in x 5in or 6in, and 10in or 12in x 6in) ..	£34/0/0 per ton
Extra cost over basis for following sections—	
9in or 18in x 7in, 14in x 5 1/2in, 15in x 5in, 14in or 15in or 16in or 18in x 6in, 20in x 6 1/2in, 20in x 7 1/2in, 10in or 12in or 14in or 18in x 8in ..	10/- per ton
5in x 4 1/2in, 7in x 3 1/2in, 13 x 5in ..	15/- do.
12in x 5in, 22in x 7in ..	20/- do.
6in x 4 1/2in, 7in or 8in or 9in x 4in, 10in x 5in ..	25/- do.
4in x 3in, 10in x 4 1/2in ..	30/- do.
5in x 2 1/2in, 5in x 3in ..	35/- do.
6in x 3in, 24in x 7 1/2in ..	40/- do.
3in x 3in ..	50/- do.
4 1/2in x 1 1/2in ..	65/- do.
3in x 1 1/2in, 4in x 1 1/2in ..	70/- do.
1/2 mild steel reinforcing rods ex mill d/d	£35/10/0 do.
Extras per ton	
1/8in diameter in size ..	59/6 per ton
1/4in ..	72/- do.
3/8in ..	92/- do.
1/2in ..	132/- do.
3/4in ..	172/- do.
1in ..	192/- do.
Extras for length	
5ft to 3ft ..	7/6 do.
3ft to 2ft ..	15/- do.
2ft ..	22/6 do.
40ft to 45ft ..	15/- do.
45ft to 50ft ..	22/5 do.
Bolts and Nuts ..	90/- per cwt
Trench covering, including trays 1 1/2in deep and rebated frames, 9in wide ..	23/- foot run
Do., but 12in wide ..	24/9 do.
Do., but 14in wide ..	27/- do.
Do., but 18in wide ..	35/6 do.

**METAL SUNDRIES**

Cast iron pavement light filled with 4in x 3in glass lenses ..	32/- per ft super
1/2in wrought iron plate door in four panels with stiles and rails on both sides ..	50/- do.
20 gauge galvanized iron trunking and straps ..	6/- do.
24 gauge galvanized Tallboy 6ft high 9in diameter with 9in x 12in base ..	57/6 each

**CHAIN LINK FENCING—**

	In 25 yards lineal rolls inclusive of line wire, Height in inches—				
2in mesh	36	42	48	60	72
10 1/2 wire gauge ..	99/-	115/6	132/3	164/9	198/-
12 1/2 do. ..	69/9	81/3	93/-	116/3	139/-
14 1/2 do. ..	50/-	58/-	66/6	83/-	99/6

**DOUBLE SOOT DOORS AND FRAMES—**

Fitted with brass turnbuckle and cast key ..	9in x 9in 19/6	12in x 9in 28/9	14in x 12in 49/6
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**SLIDING DOORS, GATES AND PARTITIONS—**

Factory sliding doors in two leaves containing about 100 square feet with mild steel angle frames covered with 24 gauge corrugated galvanized sheeting and including hanging tubular track and gear complete ..	15/6 foot super
Factory entrance gates with mild steel frames clad with 2in mesh chain link complete ..	12/- do.
Steel partitioning, glazed (rough cast) and stove enamelled ..	18/6 do.

**STEEL ROOF LIGHTS—**

Lanterns with vertical sides, and hipped roof glazed with 1/2in cast glass and lead flashed ..	14/- foot super
Skylights of similar construction (27ft super) ..	20/- do.

**HIGH GRADE DOMESTIC BOILERS**

Coke Fed. Performance 20 to 40 gallons raised from 40°F to 140°F per hour as under.

TYPE	Plain cast iron black finish	£ s. d.
20 gallons per hour 15in wide, 23in high	.. ..	9 0 0
25 gallons per hour 19in wide, 22in high	Ditto, in cream mottle finish including side jackets ..	13 0 0
40 gallons per hour 22in wide, 23in high	In cast iron as before and base plate ..	11 10 0
	Ditto in cream mottle with side jackets and base ..	16 17 0
	In cast iron, etc., as last ditto ..	18 5 0
	Ditto in cream mottle all as last ditto ..	24 13 0

**GAS, WATER AND STEAM TUBES**

(From Standard-List)

Internal Diameter—	1/2in	3/4in	1in	1 1/4in	1 1/2in	2in
Tubes per ft	4d	4 1/2d	5 1/2d	6 1/2d	9 1/2d	1 1/4 1/4 1/10
Bends each	8d	9d	11d	1 1/2	1 7/8	2 7/8 3/2 5/2
Elbows, sq. do.	10d	11d	1 1/4	1 1/2	1 5/8	2 1/2 2 7/8 4 3/4
Do., round do.	11d	1 1/4	1 1/2	1 5/8	2 1/4	2 10 4 8
Tees ..	1/-	1 1/4	1 1/2	1 5/8	2 1/4	2 10 4 8
Crosses ..	2/2	2 1/4	2 9	3 3	4 1	5 6 6 7 10 6
Backnuts ..	2d	2d	3d	3 1/2d	5d	6d 8d 1 1
Sockets ..	3d	3d	4d	5d	6d	8d 10 1/2d 1 3
Sockets, dimin.	4d	5d	6d	7d	9d	1/- 1 1/4 2/-

**PERCENTAGES ON OR OFF ABOVE**

In quantity and in random lengths.

	TUBE—			
Class A (light)	—12 1/2%	Black	+9%	Galvanized
Class B (medium)	—2 1/2%	Do.	+20%	Do.
Class C (heavy)	+12%	Do.	+37%	Do.
	FITTINGS—			
Lightweight	+22%	Black	+35%	Galvanized
Heavy	+30%	Black	+45%	Do.

**RAINWATER GOODS (Painted or Unpainted)**

In consignments of 5 cwt. and over

From Standard List

Pipe:	2in	3in	4in	5in	6in
6ft lengths ..	each 12/10	14/5	18/11	24/8	31/6
3ft do. ..	do. 7/-	7/9	10/-	13/1	16/6
Shoe, ordinary ..	do. 2/7	3/10	5/7	9/5	12/11
Bend ..	do. 3/1	4/4	6/3	11/3	14/7
Branch, single ..	do. 4/6	6/7	9/3	14/7	22/6
Offset, 4 1/2in ..	do. 3/9	5/3	7/9	12/11	17/-
Do. 9in ..	do. 4/11	6/6	9/8	15/3	19/3
H.R. gutter, 6ft. length	do. —	6/-	8/5	10/4	13/10
Angle or nozzle ..	do. —	2/6	3/1	3/9	5/4
Stop end ..	do. —	9d	1/1	1/6	1/9
					Above plus 12 1/2%

## CURRENT MARKET PRICES (Continued)

## PLASTERING MATERIALS

Sand, lime, cement and various plasters are previously included under those heads—			
Metal lathing ( $\frac{3}{8}$ " $\times$ 24G) (20 yards)	..	3/8 $\frac{1}{2}$ sq. yard	
Plaster baseboard $\frac{3}{8}$ " (300 to 599 yards)	..	2/6 do.	
Lath nails, galvanized	..	1/2 lb.	
White glazed tiles (6" $\times$ 6" $\times$ $\frac{1}{4}$ ")	} small quantity	18/6 sq. yard	
Do. rounded on one edge		22/6 do.	
Do. on two adjoining edges		27/- do.	

## PLUMBER'S GOODS

4 lb. lead sheet (in 1-ton lots)	..	149/9 per cwt	
Lead water pipe in coils (do.)	..	151/- do.	
Plumber's solder	..	3/7 lb.	
Copper tacks	..	6/9 do.	

## IRON SOIL AND WASTE PIPE. (5cwt lots and up)

	2in	3in	3 $\frac{1}{2}$ in	4in
<i>each</i>				
$\frac{3}{8}$ in Medium pipe, 6ft length	14/6	17/2	19/3	21/11
Do, 4ft length	10/5	12/2	13/7	15/5
Bends	5/4	6/6	8/1	9/1
Do, with oval door	17/4	18/6	21/1	24/7
Junction, single	6/6	9/8	11/3	13/3
Do, with oval door	18/6	21/8	24/3	26/3
Swan necks, 4 $\frac{1}{2}$ in	6/6	10/3	11/9	13/9
Do, 9in	8/8	11/9	13/9	16/1
Holderbat, 2 $\frac{1}{2}$ in projection	4/11	5/1	5/4	5/6
	Above plus 12 $\frac{1}{2}$ %			

## GALVANIZED CISTERNS, TANKS AND CYLINDERS—(Less than four)

<i>each</i>	gallons			
<i>CISTERNS—</i>				
Bends over tops and corner plates. Riveted or welded	Nominal capacity			
	100	150	200	300
14 gauge	180/-	243/-	296/-	424/-
12 gauge	208/-	277/-	328/-	456/-
$\frac{1}{2}$ in plate	246/-	310/-	372/-	522/-
HOT WATER TANKS	20	25	30	40

Riveted and with handhole and ring.				
12 gauge	124/-	137/-	150/-	180/-
$\frac{1}{2}$ in plate	137/3	151/-	163/-	199/3

HOT WATER CYLINDERS—	20	25	33	39
Riveted, with handhole and ring.				
12 gauge	160/-	176/-	189/-	204/6
$\frac{1}{2}$ in plate	177/-	195/6	214/-	226/6

## PLUMBER'S BRASSWORK, etc. Each

	$\frac{1}{2}$ in	$\frac{3}{4}$ in	1in	1 $\frac{1}{2}$ in
Boiler screws, single nut	1/7	2/1	3/5	5/1
Do, double nut	2/2	2/10	4/8	6/10
Cap and lining	1/2	1/7	2/-	2/3
Plumber's unions	2/7	3/2	4/6	8/-
Ball valves, screwed iron	15/10	23/9	—	—
Do, fly nut and union	17/1	25/6	—	—
Bib valves, crutch top				
screwed iron	10/3	15/-	—	—
Do, but screwed boss	11/6	16/9	—	—
Stop valves, screwed iron	8/9	12/9	—	—
Do, screwed iron and union	10/9	16/3	27/-	—
Do, double union	11/6	17/-	31/3	—
Waste, plug chain and stay	—	—	8/-	9/-
	1 $\frac{1}{2}$ in	1 $\frac{1}{2}$ in	2in	4in
Caps and screws	3/1	3/10	5/6	—
Sleeves, long	—	—	7/8	11/1
Do, short	—	3/10	4/3	10/6
Thimble	—	3/10	4/10	10/7
Full way gate valves, hot pressed	21/9	30/6	—	—
		1 $\frac{1}{2}$ in	1 $\frac{1}{2}$ in	2in
Lead 7 lb P. trap	—	7/10	10/3	14/6
Do, S. trap	—	9/8	12/8	17/10
Lead 6 lb P. traps with 3 in seal	—	8/9	10/7	—
Do, but S. traps, ditto	—	10/11	13/3	—
Wire balloon guards, copper, 2in 3/1; 4in 3/4				
Ditto, galvanized iron, 2in 1/11; 4in 2/1				
Hair felt, 34in $\times$ 20in, 24 oz, 6/- sheet				
Boss white jointing compound, 2/- lb				
Gaskin, 1/5 $\frac{1}{2}$ lb Hemp, 7/3 lb				

## COPPER TUBES—Extract from B.S. 659/1944—

Nominal bore	Outside diameter inch	Internal work (semi-hard) Gauge	Weight lb per ft	Price per lb pence	3 cwt lots Price per ft pence
$\frac{1}{2}$ in	0.596	19	0.27	52 $\frac{1}{2}$	14.25
$\frac{3}{4}$ in	0.846	19	0.39	51 $\frac{1}{2}$	19.94
1in	1.112	18	0.62	49	30.77
1 $\frac{1}{2}$ in	1.362	18	0.76	49	37.24
2in	1.612	18	0.91	49	44.59
2 $\frac{1}{2}$ in	2.128	17	1.40	50 $\frac{1}{2}$	70.88

## CAPILLARY TYPE CONNECTIONS—

All ends copper to copper						
Each	$\frac{1}{2}$ in	$\frac{3}{4}$ in	1in	1 $\frac{1}{2}$ in	1 $\frac{1}{2}$ in	2in
Straight	1/9	2/6	3/11	5/4	6/10	9/10
Bends	4/7	5/8	8/1	11/1	17/4	24/4
Tees	4/2 $\frac{1}{2}$	4/11	7/11	11/7	16/6	23/3
Brackets (Brass)	2/5	2/10	3/4	—	—	—

## GLASS

	Per foot superficial	
English, flat drawn sheet glass cut to sizes in squares	24oz 8 $\frac{1}{2}$ d	26oz 11d
Figured rolled and cathedral, white, cut to sizes, in squares ( $\frac{1}{2}$ in)	10d	Per foot super
Ditto, but in standard tints	1/5 $\frac{1}{2}$	do.
$\frac{1}{2}$ in Rolled, cut to size, in squares	10d	do.
$\frac{1}{2}$ in or $\frac{3}{8}$ in rough cast ditto	1/1	do.
$\frac{1}{2}$ in ditto wired ditto	1/3 $\frac{1}{2}$	do.
Georgian wired ditto	1/3 $\frac{1}{2}$	do.
Fluted (No. 4) ditto	1/4	do.
Reeded, (narrow, broad, cross and major) ditto	1/2	do.
Reedylite (narrow and broad) ditto	1/2	do.
Spotlyte ditto	1/2	do.
$\frac{1}{2}$ in Calorex Cast ditto	1/3 $\frac{1}{2}$	do.
Calorex Sheet (15oz)	6/6	do.
ditto. (21 oz)	9/-	do.
Flashed Opal (15/18oz)	3/10	do.
Pot Opal (15/18oz)	3/9	do.

## POLISHED PLATE GLASS (Tariff) Cut to sizes.

Ordinary substance $\frac{3}{8}$ in and $\frac{1}{2}$ in thick.	
Per Superficial foot.	General Glazing

In plates not exceeding:	
2ft super in each	3/7
5ft ditto	4/5
45ft ditto (unless extra sizes)	5/1
100ft ditto (ditto)	5/6
Extra sizes, i.e., Plates exceeding 100 ft. super or 160in one way or 96in both ways at higher prices.	

## DECORATING MATERIAL

	Price	Unit
Aluminium Paint	37/6	Gallon
Distemper, ceiling	35/-	Cwt
Distemper, washable	120/-	do.
Enamel	60/-	Gallon
Gold Metallic Paint	86/6	do.
Heat Resisting Paint	50/-	do.
Japan, black	23/6	do.
Knotting	40/-	do.
Linseed Oil	19/7	do.
Boiled, ditto	19/11	do.
Proprietary Paints (good class)—		
Finishing	57/6	do.
Priming	62/-	do.
Undercoat	56/-	do.
Paperhanger's Paste	36/6	Cwt
Petrifying liquid	8/9	Gallon
Putty	58/-	Cwt
Size	9/3	Firkin
Terebine	16/-	Gallon
Turpentine substitute	6/9	do.
Varnish, oak, copal inside use	33/-	do.
Ditto, ditto, outside use	38/-	do.
Ditto, white, eggshell, flat	44/6	do.
White lead mixed paint	72/-	do.
White lead	198/-	Cwt
Whiting	13/3	do.

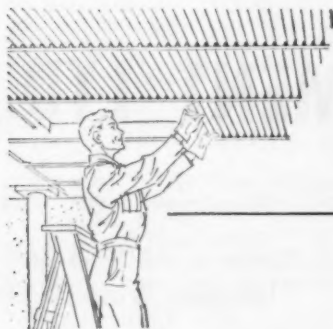
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**THE NATION IS BEING PARTITIONED..... BY N.S.E.**



# CURRENT MEASURED RATES (LONDON)

These apply to new work of normal character and some size. These rates are for time and materials only and carry 10 per cent in excess, so the appropriate essential on-costs should be added. The basis cost of material used in the calculation of these prices is taken from the foregoing tables which carried up to May, 1956.

(COPYRIGHT)

## ESSENTIAL ON-COSTS

Fees payable to L.C.C. for District Surveyor:	
For new buildings of ordinary construction exceeding 5,000 cubic feet, for every 1,000 feet or part of same up to 1,000,000 cubic feet 1/6, together with an additional sum of £1/10/-	£1/10/- at + 1/6
After which allow per 1,000 do. . . . .	at + 9d.
For alterations and additions:	
When £100 the sum of £2/10/-, plus 12/6 for every £100 or part of same, up to £1,000	£2/10/- at + 12/6 per 100
When over £1,000 the sum of £8/2/6, and for every £100 or part of same beyond 3/-	£8/2/6 at + 3/- per 100
Public buildings: Fees as above but plus 50%	+ 50%
Fees in respect of means of escape in case of fire are 1/5th of the above or £2 if greater or in the case of a one-storey building £1	
Steel framed or r.c. buildings double	1/5th + 100%

Allowance to cover National Insurances, Holidays with Pay and Public Holidays, Welfare, Third Party Risk, Travelling and Guaranteed Week is made in the rates attached to the items.	
Allow for Fire Insurance do. . . . .	1/6%
Allow for Water for use on the works and apparatus do. . . . .	6/6%
Allow for hoarding, or similar licences in City of London say £10 Do. under Borough Councils per each month . . . . .	say 2/6
Allow for Office, Fire, Attendance on C. o W., etc. p. week say £1	

Supervision, etc., assessment	Contract value				
	£4,000	£6,000	£12,000	£24,000	£50,000
Cost. of admin. . . . .	6%	5%	5%	4½%	4½%
Agent or foreman (each) . . . . .	5%	4½%	3½%	2½%	1½%
Timekeeper or Watchman (each) . . . . .	2½%	2½%	1½%	1%	¾%

SPOT ITEMS AND DEMOLITION, ETC.		Per foot run
Hoarding erected and removed . . . . .		19/-
Planked gangway with handrail, etc. do. . . . .		10/-
Proper gantry do. . . . .		75/-
Sleeper roadways . . . . .		16/-
Needling, strutting and shoring including all labours and use and waste in erection and removal . . . . .		19/-

ALTERATION-DEMOLITION—	Brick			Per yard cube
	1	1½	2	
Cutting out cement concrete or brickwork in small quantities . . . . .	1/3	2/5	3/5	61/-
Do. if either in very small quantities or reinforced . . . . .	2/2	3/11	5/8	89/11
Debris into baskets and removed from inside to outside of bldg. . . . .	3½d	7d	9d	13/-

SCAFFOLDING (Avg. 45ft high)		Period		
Per yard superficial		1 month	3 months	5 months
Putlog type—4' 6" lift . . . . .		6/2	8/3	10/8
Do. —6' 0" do. . . . .		4/7	6/4	8/1
Independent type—4' 6" lift . . . . .		7/11	11/4	14/10
Do. —6' 0" do. . . . .		5/8	8/2	10/3

EXCAVATION	Common Soil	Loamy Clay	Gravel or Clay	Rock or similar
Per Yard Cube. By hand . . . . .	6/1	7/3	8/6	56/9
Reducing levels . . . . .				
Surface trench not exceeding 5ft deep . . . . .	12/5	14/10	19/9	70/7
Do. from 5ft to 10ft . . . . .	22/8	25/6	30/6	77/-
Do. from 10ft to 15ft . . . . .	28/3	31/1	36/-	84/3
Fill in and ram . . . . .	4/10	5/6	5/6	5/6
Barrowing 25 yds . . . . .	2/10	3/2	3/2	3/7
Load vehicles and tip 8 miles away . . . . .	16/-	16/-	17/-	17/9

PLANK AND STRUT		To 5ft deep	5 to 10ft deep	10 to 15ft deep
To trenches, in normal ground . . . . .		7d.	8½d.	10d.
Per Foot Super . . . . .				

CONCRETE		Per yard cube
1 : 3 : 6 Cement concrete in foundations . . . . .		74/-
Do. around grillages . . . . .		77/-

REINFORCED CONCRETE		Per cubic yard
1 : 2 : 4—fin concrete, worked around reinforcement, between formwork in the following (at various levels):—		
Foundations and surface beds . . . . .		81/6
Walls, 12in thick or more . . . . .		88/3

Sectional inches	Lintols and beams	Columns and casings	Braces and projections
Up to 36 . . . . .	4/7	4/11	4/11 Per cubic ft
36 to 72 . . . . .	4/4	4/8	4/10 do.
72 to 144 . . . . .	4/3	4/6	4/9 do.
over 144 . . . . .	4/1	4/4	4/8 do.
Walls 6in thick . . . . .			17/- Per super yd
Do. 9in thick . . . . .			25/- do.
Suspended floors average 6in thick . . . . .			18/1 do.

REINFORCING RODS (round) bent and placed. (Ex Mills)—				
Per cwt	¼in	½in	¾in	1in
In floors and beams . . . . .	84/-	72/-	68/-	59/9
In walls . . . . .	90/-	76/9	72/-	63/3
In columns . . . . .	96/8	81/6	76/3	66/-

FORMWORK and Supports (4 times use)—			
Floor soffits	Beams	Walls	Columns
19/- per Yard	2/6	2/4	2/4 per super foot

BRICKWORK	
BRICKWORK per YARD superficial reduced to ONE BRICK in thickness (scaffold to add)— In 1 : 3 cement mortar	
Flettons or other similar at 113/- per 1,000 . . . . .	39/7
Mild Stocks or do., at 226/6 per 1,000 . . . . .	53/10
Second Stocks or do., at 261/- per 1,000 . . . . .	57/7
Southwater engineering or similar bricks, at 379/- per 1,000 . . . . .	74/3
Blue Staffordshire wire cut at 510/6 per 1,000 . . . . .	88/3
Deduct if 1 : 1 : 6 Cement-Lime mortar is used in lieu of 1 : 3 Portland Cement mortar . . . . .	2d
Add if brickwork commences above ground level . . . . .	4/-
Do. if in backing to masonry including cutting and waste for bonding . . . . .	3/3
Do. If circular-on-plan . . . . .	7/8
Do. If in underpinning . . . . .	7/8

BRICKWORK IN THICKNESS NOT REDUCED—				
Per yard superficial	Brick, on edge walls	Half-Brick walls	1 Brick finished fair both sides	11" Hollow with 2" cavity and G.I. ties
In Flettons or similar . . . . .	17/2	21/11	40/7	46/3
In second stocks or do. . . . .	22/6	29/9	55/8	61/8
Add: for pointing as work proceeds, per side . . . . .	1/7	1/9	1/7	1/7
Thickness to old walls, including cutting, toothing and bonding to same an average total thickness of ½ brick . . . . .		55/-	67/-	Per yard super do.
Do. all as last but an average total thickness of 1½ bricks . . . . .		75/-	96/-	

WALLS BUILT IN SUPERIOR BRICKS—			
In 1 : 3 Cement mortar, fair faced and pointed on both sides as the work proceeds:—	Half-Brick	One Brick	
In first quality Stocks at 282/- . . . . .	36/3	64/7	Per yard super do.
In red facings at 310/- . . . . .	36/-	64/6	
In bluepressed facings at 562/- . . . . .	56/8	98/11	

GENERAL AND SUNDRY—	
Cut tooth and bond new brickwork to old . . . . .	4/11 per ft
Damp proof course, double slate, horizontal . . . . .	3/9 super
Do., as last, but vertical . . . . .	4/7 do.
Do., bitumen, Hessian base, do. . . . .	2/- do.
Frames, bed and point in cement mortar, one side 4½d per ft run	
Window board of 6"×6"×½" rounded on edge	
quarry tiles, bedded, pointed, cut and fitted . . . . .	3/6 do.
Terra cotta air bricks built in and pointed, including flue . . . . .	9"×6" 9"×9" 5/6 10/- each
Chimney pots, plain red, set and flauched in cement mortar . . . . .	1ft high 2ft high 14/9 21/- each
Metal windows, assembled, hoisted and fixed, lugs cut and pinned and frames bedded and pointed one side in cement mortar . . . . .	Up to 5ft super 5ft to 10ft super 12/8 15/11 each
Leaving holes through walls for pipes and afterwards making good . . . . .	Small pipes 3d per in in depth 40/8 each Large pipes 6d per in in depth 40/8 each
Cutting do., and afterwards do. . . . .	11d do. 1/9 do.
Cut mortices in brickwork or concrete for bolts or dowels and run in with cement grout . . . . .	1/2 per in in depth, each
Holdfasts of stout iron hoop bent holed and screwed to frame and built in . . . . .	1/4 each

**MEASURED RATES—Continued****BRICKWORK—Continued****FACING—**

Extra only over common brickwork (113/- per 1,000) for facing with superior bricks in *Flemish bond* and pointing as the work proceeds.

Rustic Flettons (138/-)	..	..	3/9	per yard super
White (210/-)	..	..	9/9	do.
First Stocks (282/-)	..	..	15/-	do.
Reds (310/-)	..	..	16/6	do.
Blue pressed (562/-)	..	..	34/10	do.

If built in English bond, Add 12½% to above

If do. half-brick stretcher bond, Less 25% off above.

**COPING—**

All labour and material in forming brick-on-edge coping with two course of roofing tiles under and cement weather fillets on both sides, built in cement and pointed as the work proceeds.

	Per foot run	9" thick	14" thick
In picked Flettons ..	..	6/3	8/5
In first quality Stocks ..	..	7/7	11/1
In red facings ..	..	7/5	10/11

Plumbing angles ..	..	2d. per foot run
Fair cutting ..	..	11½d. do.
Fair raking cutting ..	..	1/6½ do.
Fair circular cutting ..	..	1/6½ do.
Fair squint or birdsmouth ..	..	1/10½ do.

**ARCHES**

Extra over Fletton brickwork for forming window head with red facing bricks set on end and with 4½" soffits and pointing ..	..	..	foot run
Do. for rubbed and gauged flat arch in red rubbers set in putty with fine joints ..	..	..	foot super

**PARTITIONS**

		Per yard super—	
	(over 100 Yards)	2in	2½in 3in
Concrete slab partitions in cement mortar	..	10/9	12/2 14/4
Hollow clay do.	..	12/9	13/8 15/3
Cutting and bonding at angles, intersections and ends ..	..	5d.	foot run

**PAVING**

	1in	1½in	2in	2½in	3in
Grano trowelled gauge 5 : 2	8/2	9/2	10/3	yard super	
1 x 5in skirting, square top and cove bottom	..	..	2/10	foot run	
1in x 6in red quarry tile paving	..	..	29/-	yard super	
1in x 6in do. skirting	..	..	1/10	foot run	
Jointless flooring, 1in thick	..	..	20/-	yard super	

**ASPHALT (normal conditions and fair quantity)**

1in pitch mastic floor in one coat on felt underlay on prepared concrete base	..	..	B.S.	
	1450/48	1375/47		
		Brown	Red	
		13/2	15/-	
Per yard super ..	12/6	Mastic	Natural	
	Unit	B.S.988	Rock	
1in in two thicknesses on felt underlay on prepared concrete base ..	yard super	15/-	22/6	
Ditto in narrow widths ..	foot super	2/6	3/6	
1in skirting 6in high, angle fillet at bottom splayed and turned in at top ..	foot run	2/6	2/9	
External angles ..	each	6d.	6d.	
Internal ditto ..	each	10d.	10d.	
Tanking or Damp Course	..	B.S.1097/43	B.S.1418/47	
Vertical in two thicknesses	yard super	22/6	30/-	
1in horizontal ditto ..	yard super	13/6	23/6	
Vertical in three thicknesses	yard super	32/-	41/-	
1½in horizontal ditto ..	yard super	18/-	29/-	
Labour rounded external angle ..	per foot run	6d.	6d.	
Ditto internal angle fillet ..	per foot run	10d.	11d.	
Ditto double ditto ..	per foot run	1/3	1/3	
Collars to small pipes ..	each	3/6	4/-	
Ditto to large pipes ..	each	6/6	8/-	

**DRAINAGE**

Per lineal yard	1 foot in depth	..	4/9
Excavate trench, and plank and strut to sides, consolidate bottom to fall, return fill and ram earth after drain is laid and load and remove surplus. In ordinary ground—moderately firm	2	do. ..	8/3
	3	do. ..	19/3
	4	do. ..	25/-
	5	do. ..	32/-
	6	do. ..	42/11
	7	do. ..	52/4
	8	do. ..	66/3
	9	do. ..	77/-
	10	do. ..	94/8
	11	do. ..	107/5
	12	do. ..	121/-

Portland cement (1 : 6)	Per yard run		
concrete bed under drain	4in	6in	9in
pipes and benching up on	18in wide	20in wide	23in wide
both sides—6in thick	8/-	9/6	11/6

**SALT GLAZED SANITARY DRAIN PIPES**

and lay and joint with Yarn and Cement Mortar in trench.

	Quality	Quantity	4in	6in	9in
"Best"	..	2 Tons or more	3/2	4/4½	7/4
	..	over 100 pieces	3/5	4/10½	8/2
	..	under 100 ditto	3/6	4/11½	8/6
"Best Tested"	..	2 Tons or more	3/11	5/1½	9/2
	..	over 100 pieces	4/4	6/4½	10/6
	..	under 100 ditto	4/5	6/7½	10/10
"British Standard"	..	2 Tons or more	3/4	4/11½	7/9
	..	over 100 pieces	3/9	5/6½	8/9
	..	under 100 ditto	3/10	5/9½	9/6
"British Standard Tested"	..	2 Tons or more	4/1	6/1½	9/11
	..	over 100 pieces	4/8	7/1	11/4
	..	under 100 ditto	4/11	7/3½	12/-
Extra for bends "Best"—Contained in 2 Ton lots.	..	..	4/2	6/3	16/6
Extra for junction "Best"—4in on 4in, 6in on 6in—9in on 9in	..	ditto	6/6	9/9	27/-

**IRON DRAIN PIPES—**

Heavy cast iron socketed and laying and jointing in molten lead—	..	..	Per foot run
In main runs ..	..	..	4in 6in
In branches ..	..	..	13/- 18/1
	..	..	14/4 19/8
Extra over last for bends and extra joint ..	..	..	each 28/- 60/6
Do. on do. for junctions and extra joint ..	..	..	41/6 78/-
Cast iron gully with 10½in inlet and 4in outlet, composed of hooper and trap, and 9in extension piece and 10½in grating, and jointing all together, and jointing to drain and surrounding in concrete ..	..	..	175/- —
Do. rain water, shoe with vertical inlet and inspection cover, and joint up and embed	..	..	80/- 133/-

**MANHOLE SUNDRIES—**

Salt glazed straight half-round main channels ..	..	..	4in 6in
Do. curved ..	..	..	5/- 7/-
Do. three-quarter section splayed channel bends (Barrons or similar) ..	..	..	10/6 15/-
Heavy manhole steps galvanized ..	..	..	14/3 20/8
Fix only manhole covers ..	..	..	9/9 —
4in Mica flap, brass faced, f.a.i. valves and fix with molten lead joint ..	..	..	11/- —
	..	..	38/6 —

**ROOFER****CORRUGATED ASBESTOS SHEETS**

P.C. 7/4½ per super yard, including side and end laps and fixing to wood ..	..	..	144/- per square
Eaves filler pieces ..	..	..	2/- foot run
Adjustable ridge ..	..	..	3/6 do.
Barge boards ..	..	..	2/8 do.
Plain roofing tiles, machine made, sand faced, 4in gauge nailed every 4th course with 1½in galvanized nails, to battens (measured separately) ..	..	..	252/- do.
Extra over last for top edge or abutment cutting	..	..	1/3 do.
Do. for double course at eaves ..	..	..	2/5 do.
Do. for verges, undercloak, bed and point	..	..	3/6 do.
Do. Valley tiles including cutting and waste on both sides ..	..	..	11/3 do.
Do. Bonnet hips and do. bed and point	..	..	11/9 do.
Half-round ridge and bed and point ..	..	..	3/3 do.
Fixing soakers ..	..	..	1/6 dozen

Bituminous felt roofing in two layers, laid breaking joint and bedded with hot mastic and finished with fine dry grit ..

Do. but in one layer only ..	..	..	11/6 yard
	..	..	8/6 super

**WELSH SLATING**

16" x 10" 18" x 10" 20" x 10"

3in lap, 2 zinc nails to each slate ..	312/6	319/6	378/6
--	-------	-------	-------

**Additional labours**

	Per foot lineal		
At tops, verges and abutments—straight	1/7	1/9	1/11½
Do. —raking	2/4½	2/7½	2/11
At hips and valleys (each side)	2/4½	2/7½	2/11
At eaves, double course	3/2	3/5	3/11
Do. to falls ..	4/9	5/-	5/9

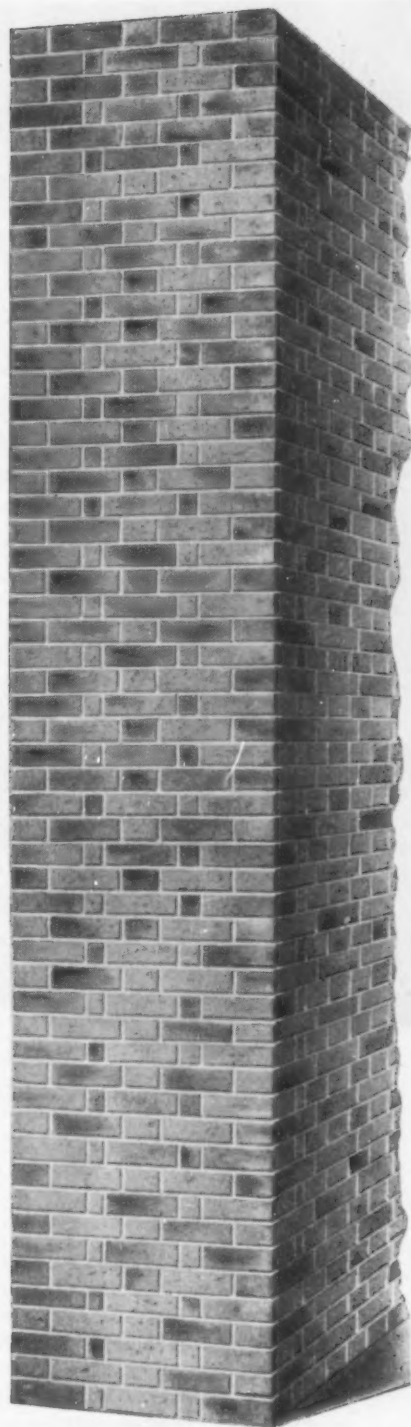
One inch of

**FIBREGLASS**  
TRADE MARK

resists the  
passage of heat  
as effectively as

32 inches of  
solid brickwork

What kind of filling  
is going into your  
curtain walling these days?





The new modern store of Messrs. David Greig of Canterbury lit with Philips internal reflector lamps. Installation planned in collaboration with the Architects, Messrs. Robert Paine & Partners, Canterbury.

for ways  
and means  
to  
imaginative  
lighting  
—TALK TO PHILIPS:  
it costs  
you  
nothing

MANY of the more imaginative lighting schemes of recent years have been the result of close co-operation between architects, electrical contractors and the Philips Lighting Design Service.

The advice and assistance provided by this Philips Service is entirely free, and the experienced lighting engineers in each Philips

branch area can call on the accumulated knowledge of the Century House staff, which includes a fully qualified architect who has made a special study of lighting in its relation to architecture and colour.

*Philips will be happy to design for you — there is no charge.*



# PHILIPS ELECTRICAL LTD.

LIGHTING DIVISION · CENTURY HOUSE · SHAFTESBURY AVENUE · LONDON WC2

For lighting design enquiries by telephone please ring COVent Garden 3371

TUNGSTEN, FLUORESCENT, BLENDING AND DISCHARGE LAMPS · LIGHTING EQUIPMENT · RADIO & TELEVISION RECEIVERS · "PHOTOFUX" FLASHBULBS, ETC. (LD739C)



**MEASURED RATES—Continued****FLOORS AND FLATS**

Hollow tile in situ or precast units hoisted, bedded and fixed— Superimposed load			
in lb per foot super	12 feet	16 feet	
50 ..	45/-	51/1	
Per yard super	100 ..	46/9	54/-
150 ..	50/6	57/6	

20lb has been allowed to cover dead load in surface, finish.  
Fair edge to slabs .. .. 9d. per foot run  
Splay cutting and waste .. .. 1/9 do.

**CARPENTER AND JOINER**

SOFTWOOD CARCASSING— Labour, materials, waste nails, hoisting and fixing ..			
Plates	Joists	Rafters	Trusses
18/10	20/1	21/8	24/3

FLOORING—	Per square—	3in	1in	1½in
Rough boarding .. ..		141/6	161/6	198/6
Softwood batten flooring, straight joints, splayed headings ..		143/-	163/-	200/6
Do. grooved and tongued ..		162/8	193/2	237/9

SKIRTING—	Per foot superficial—	3in	3in	1in
Wrot softwood moulded skirting with grounds and backings plugged ..		3/8	4/3	4/10
Mitres to do. ..	3d. per sectional inch			
Fitted ends ..	2d. do.			

SASHES, fanlights, casements, borrowed lights, etc.—			
Per foot super—	Without bars	With bars (2ft sup. in each square)	
2in softwood rebated, moulded and fixed ..	3/2	5/7	
Add if fitted with beads ..	6d.	1/6	
Add if hanging on butts ..	2/5 each		

WINDOWS, hung on lines—				
Softwood cased frames, 1in inner and outer linings, 1½in pulley stiles, 2in sashes, oak sill ..				
Overall size of frames—				
Per foot super ..	6ft	21ft	32ft	44ft
Windows as described ..	19/-	10/7	7/11	6/2
Add if sashes in squares, about 2 feet super in each ..	—	1/6	2/-	1/11
Extra for hanging sashes with lines, weights and axle pulleys ..	30/3	50/3	62/3	84/3

FINISHINGS TO OPENINGS—				
Per foot super—				
Softwood linings, tongued at angles and tongued to frame including grounds ..	3in	1in	1½in	1½in
and backings ..	3/7	4/1	5/-	5/7
Add if crosstongued ..	6d.	6d.	6d.	6d.
Softwood wrot rounded on front edge and with tongue at back window board including groove in sill and bearers ..	3/6	4/-	4/11	5/5
Add for ends to last notched, returned and rounded ..	1/1	1/2	1/3	1/4

Per foot run—						
Sectional area in inches—						
1	2	3	4	5	6	
Softwood wrot and fixed in bearers, backings, grounds, fillets, and similar ..	3½d.	6d.	8½d.	11d.	1/14	1/3½
Add if in short lengths ..	2d.	2d.	2½d.	2½d.	3d.	3d.
.. if plugged to brickwork ..	4d.	4d.	4d.	4d.	4d.	4d.
.. if framed as in legs and bearers ..	3d.	3d.	4d.	4d.	6d.	6d.
.. if rebated or grooved or beaded ..	½d.	½d.	½d.	½d.	½d.	½d.
.. if chamfered or rounded edges ..				1½d.		
.. if moulded in architraves, capping, etc. ..				3d.		

DOOR FRAMES—						
Per sectional inch—						
Softwood, wrot, rebated, rounded framed and fixed ..	2/2	2/6	3/2	3/6	3/9	

DOORS—Per foot super						
Number of panels—						
2in Softwood square framed and flat panels, both sides, on butts ..	5/8	6/6	7/-	7/6	7/10	8/4
1½in do. ..	5/1	5/11	6/4	6/9	7/2	7/8
Add for each side moulded ..	3d.	4d.	5d.	6d.	7d.	8d.
Add B.S. flush panelled ..	1/6	1/6	1/6½	1/7	1/8	1/8

per foot super—				
In shelves, table tops, wrot and fixed ..	2/4	2/7	3/-	3/6
Do. in divisions and ends framed ..	2/7	2/10	3/3	3/11
Add if crosstongued ..	6d.	6d.	6d.	6d.
Add if buttoned ..	6d.	6d.	6d.	6d.

SUNDRIES—Per foot run ..	In short lengths	In long lengths	Add for cups and screws
Glazing, beads mitred around and fixed with brads ..	6d.	4d.	2d.
Rounded heel or hollow ..		4d.	
Tongued and grooved angle ..		6d.	
Glue blocking ..		6d.	
Mitres ..	3d.	per sectional inch.	
Fitted ends ..	2d.	do.	

STAIRCASE—			
1½in Softwood treads with moulded nosings, risers tongued both edges and glued, blocked and bracketed on and including two fir framed carriages ..	1in	Per ft Super	
Do. but in winders ..		7/3	
1½in crosstongued landing on framed carriages ..		6/-	
2in moulded string ..		5/-	
2in do. ramped ..		11/9	
Ends framed to newel ..		9/8	each
Tongued and mitred angles ..		5/6	do.
Tongued heading joints ..		5/6	do.
Ends of treads and risers housed to string ..		3/6	do.
Extra for curtail ends to steps, glued up and veneered riser and solid blocking ..		100/-	do.
Balusters about 2ft 9in long, square and framed each end ..	1in	1½in	1½in
3½in × 3½in square newel, framed ..	3/9	4/6	5/3
African mahogany moulded 3in × 2in hand-rail. (Joints below) ..	4/-	per foot run	
Do. ramped 18in girth (do.) ..		8/9	do.
Do. wreathed do. (do.) ..		52/-	each
Joint or framed ends ..		155/-	each
		11/-	each

FIXING ONLY IRONMONGERY		
To deal	To hardwood	
Barrel bolts ..	1/8	2/6 each
Flush bolts ..	4/-	4/10 do.
Sash fasteners ..	3/2	2/10 do.
Rim locks and furniture ..	5/6	7/- do.
Mortice locks and do. ..	11/-	17/- do.
Cupboard locks ..	2/9	3/5 do.
Casement fasteners ..	2/3	2/9 do.
Do. stays ..	2/3	2/9 do.
Grip handles ..	2/7	3/5 do.
Spring catches ..	2/3	2/9 do.
Cabin hooks ..	1/10	2/5 do.
Floor springs including oil ..	47/-	60/- do.
Overhead springs ..	14/-	16/6 do.
Springhinges ..	11/-	13/6 do.

**SMITH AND FOUNDER**

Basis framed steel joists and hoist and fix ..	70/- per cwt.
Do. but in compound girders ..	80/- do.
Do. but in stanchions ..	81/- do.
Trusses ..	116/- do.

Additional cost per cwt. over basic sections for following R.S.J.s

9in × 7in, 10in × 8in, 12in × 8in, 14in × 8in, 16in × 8in, 18in × 6in, 18in × 7in, 20in × 6½in, 20in × 7½in ..	7d. per cwt.
22in × 7in, 1/1 cwt. 4in × 3in ..	1/8 do.
5in × 3in, 5in × 2½in ..	2/- do.
6in × 3in, 24in × 7½in ..	2/3 do.
3in × 3in, 2/9 cwt. 4½in × 1½in ..	3/7 do.
3in × 1½in ..	3/11 do.
Cleats, brackets, packing pieces, etc., in connections, including rivets and bolts ..	154/- do.
Forged straps ..	114/- do.
Wrot iron balustrade ..	153/- do.

**RAINWATER GOODS—**

Round cast-iron pipe with socketed joints caulked with red lead and tow and fixing with pipe nails and gas barrel distance pieces to plugs in brickwork	Per foot lineal		
	2in	3in	4in
	4/0½	4/5½	5/8½
Extra for shoes .. .. . each	5/3	6/8	9/7
Do. junctions .. .. . do.	7/11	10/1	14/7
Do. bends .. .. . do.	6/2	7/11	10/2

RAINWATER GUTTERS			
Per foot run—4in			
Half round CI gutters jointed in red lead and bolted and fixed on iron brackets ..	3/9	4/6	5/6
Ogee do. All as last ..	4/3	4/11	6/1
Extra for stop ends ..	3/2	3/10	4/-
Do. angles or outlets ..	5/4	6/9	8/-

**MEASURED RATES—Continued****PLUMBER**

EXTERNAL—		Soakers		Flats		Flashings	
4lb Milled Sheet lead per cwt		190/-		227/-		238/-	
LEAD PIPES: running joints, etc.		190/-		227/-		238/-	
Per foot run		1in	1in	1in	1in	1in	2in
Main	Fixed	4/11	7/2	10/1	12/10	16/4	22/4
Service	with	4/5	6/2	8/3	10/4	12/9	18/1
Waste	hooks	2/10	4/2	5/6	8/5	9/-	11/8
Bends	each	—	—	—	1/9	3/-	8/-
Solder joints	"	8/10	10/9	12/8	14/9	17/4	22/10
Union and joints	"	12/10	16/5	18/6	24/6	—	—
Stop valve and ditto	"	28/11	37/7	51/10	80/9	—	—
Bib valve and ditto	"	20/8	28/-	—	—	—	—
Ball valve and ditto	"	22/6	31/7	49/5	71/11	—	—
Sleeve and ditto	"	—	—	—	—	21/3	28/9

**COPPER TUBES**

Tubes per foot run		1in	1in	1in	1in	1in	2in
Couplings: straight		3/-	3/8	4/10	6/-	6/10	10/1
each		3/5	4/2	6/3	8/3	10/3	14/-
Do. Bends each		6/6	7/8	10/10	14/7	21/10	30/-
Do. Tees each		7/10	9/1	13/1	17/11	23/11	31/8
Do. Cisterns each		4/4	5/9	7/6	9/8	13/4	17/6
Stop cocks each		24/4	35/4	63/-	104/6	159/-	240/-

**BLACK TUBING (Class C) fixed with pipe brackets**

Tubes, per foot run		1in	1in	1in	1in	1in	2in
Bends and fix, each		3/10	4/7	5/7	7/3	8/2	12/8
Tees and ditto		4/-	4/9	5/9	7/5	9/-	13/4
Fire bends		1/5	1/9	1/10	2/1	2/9	4/10

Coated iron (M) weight L.C.C. soil and waste fixed with nails and distance		2in	4in
pieces and molen lead joints		5/4	7/8
Extra only for bends and joint		14/2	22/8
Do. junctions and joints		15/8	28/4
Do. cleaning doors		15/-	16/4
Domical wire guards		2/6	2/9

**PLASTERER—**

		yard super	
Lime and hair	Render and set	6/8	
Do.	Ditto float and set	8/4	
Sirapite	Skimming coat	4/-	
Do.	Render and set	8/-	
Do.	Render, float and ditto	9/10	
Portland	Backing coat	4/6	
Do.	Plain face	8/-	
Do.	Floor screed	4/10	
Keenes	Skimming coat	5/2	
Dubbing	Thick or less	2/4	
Metall Lathing	mesh x 24 Gauge	6/2	
6" x 6" x 1/2" Earthenware Plain Glazed Tiles, in fair quantity, white, and setting (on prepared screed)		41/6	
Rounded edge. Extra over last		4 1/2d	per foot run
Angles in ditto		4 1/2d	each
Cutting and fitting. Around pipes or clips 1/3		ditto	
Narrow widths. 3" to 6" wide. Add 75% to plain surface.			
Ditto. 6" to 12" ditto. Add 40% to plain surface.			
Sundry labours per foot lineal:—			
Quirk 2 1/2d. Arris 3 1/2d. Fair edge 2 1/2d. Rounded edge 4d.			
Flush bead 1/6.			
Mouldings—5d. per inch girth.			
Joining new plastering to old 3d.			

**POLISHING**

NEW WORK—		Sashwork	
Staining, bodying-in and French Polish		Foot super	Foot run
Staining and wax polishing on hardwood		1/2	9d.
OLD WORK—			
Cleaning down old work and repolish		1/2	—
Stripping, preparing and repolishing		3/-	2/-

**INTERNAL PAINTING**

With white lead base in common colours, with brushes.

ON WOOD —		Knot stop and prime	Prime and paint once	Prime and paint twice	Add for each extra coat
General surfaces		2/8	5/3	7/6	2/1 Yard super

Running lengths not exceeding 3" wide	3 1/2d.	7d.	9 1/2d.	2 1/2d.	Yard run
Do. 3" to 6" wide	5d.	9 1/2d.	1/2	4d.	do.
Do. 6" to 9" wide	7 1/2d.	1/2 1/2	1/10	6 1/2d.	do.
Do. 9" to 12" wide	9 1/2d.	1/6 1/2	2/3 1/2	7 1/2d.	do.
Sash square each side	4/5	8/9	13/3	3/9	per doz.
Do. in large squares	6/-	12/6	18/4	5/3	do.
Opening edges	7d.	1/2	1/9	7d.	each

Casement frames	each side	4 1/2d.	8 1/2d.	1/-	3d.	Yard run
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Mullions or transoms, do	..	6 1/2d.	11 1/2d.	1/3	4 1/2d.	do.
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**ON PLASTER—**

		One coat	Two coats	Three coats	Per Yard super
Paint on surfaces	..	2/9	5/2	7/3	do.

Do. on mouldings	..	3/2	5/9	7/11	do.
Do. on enrichment	..	5/6	10/4	14/6	do.

**ON STEEL—**

Paint on structural steel	..	2/2	4/2	6/-	do.
Do. on roof trusses	..	3/10	7/7	10/5	do.
Do. on metal windows measured over all on both sides, divided into squares	3/3	5/6	7/11	do.	
Do. divided into large squares	..	2/9	4/9	6/4	do.
Do. divided into extra large squares	..	2/4	3/11	5/4	do.
Do. on opening edges	..	10d.	1/6	2/-	each
Do. on rain water pipe	..	10d.	1/7	2/1	Yard run
Do. on do. gutter	..	1/3	2/8	3/7	do.
Do. on small pipe	..	3d.	6d.	10d.	do.

**GLAZING (to New Work)**

Polished Plate Glass ordinary substance (about 1in), glazing quality, in the following sizes, glazed complete—Per foot super				
In plates not exceeding 2 feet super in each	..	5/11 1/2		
Do.	5	do.	6/10 1/2	
Do. (unless extra sizes) 45 feet	do.	7/7 1/2		
Do. (unless extra sizes) 100 feet	do.	8/0 1/2		
Add extra price for glazing with screw beads or clips 5d. per foot super.				
Do. if glazing bedded in washleather or velvet 9d. per foot run				

**SHEET GLASS, glazed, complete, per foot super, in new work: Ordinary quality clear, glazed to wood with putty:—**

24 oz as described	..	1/4 1/2		
26oz do.	..	1/6 1/2		
32 oz do.	..	1/10 1/2		
1/2 figured rolled and Cathedral, glazed to wood with putty	Per foot super	1/5 1/2		
Do. in standard tints	..	2/2		
No. 4 Fluted, glazed do.	..	2/0 1/2		
1in Reeded (narrow, board, etc.) do.	..	1/10		
Reedlyte do.	..	1/10		
Spotlyte do.	..	1/10		
1in Rough cast do.	..	1/9		
1in do. wired do.	..	1/11 1/2		
1in Georgian Rough Cast do.	..	1/11 1/2		
Add for glazing all as before but to steel to similar work as above, 1 1/2d. per superficial foot.				

**PAINTER AND DECORATOR****DISTEMPERING—In common colours, put on with brushes—ON PREPARED SURFACE.**

per yard super—		1 coat	2 coats	Add if required for Sealing coat	Stipp-ling
		(finish)	(under-coat and finish)		
Ordinary distemper on flat surface of plaster	..	9d.	1/4 1/2	6d.	3d.
Washable do. on do. of plaster	..	1/-	1/10	6d.	3d.
Add if in margins, narrow widths or panels	..	30%	30%	20%	50%
Add if on mouldings	..	50%	50%	45%	—
Add if on enrichments	..	160%	160%	115%	—

**PAPERHANGING**

Hanging only—		Per Piece—Lining		Pattern
On walls	..	6/10	8/2	
On stairs	..	9/4	10/10	
On ceilings	..	8/2	9/7	

# Whats Cooking... IN FLOORS ?



## **BIRDS** *experimental kitchen has colourful, hygienic flooring.*



The latest material for flooring is ACCOFLEX—the Vinyl-Asbestos Tile made by Armstrong. It was chosen for Birds kitchen and, as you can see, it is cheery and colourful in design. We cannot say whether it will be directly responsible for improving the renowned qualities of Birds products, but we do know that it is hygienic and easy to keep spick and span as a kitchen should be.

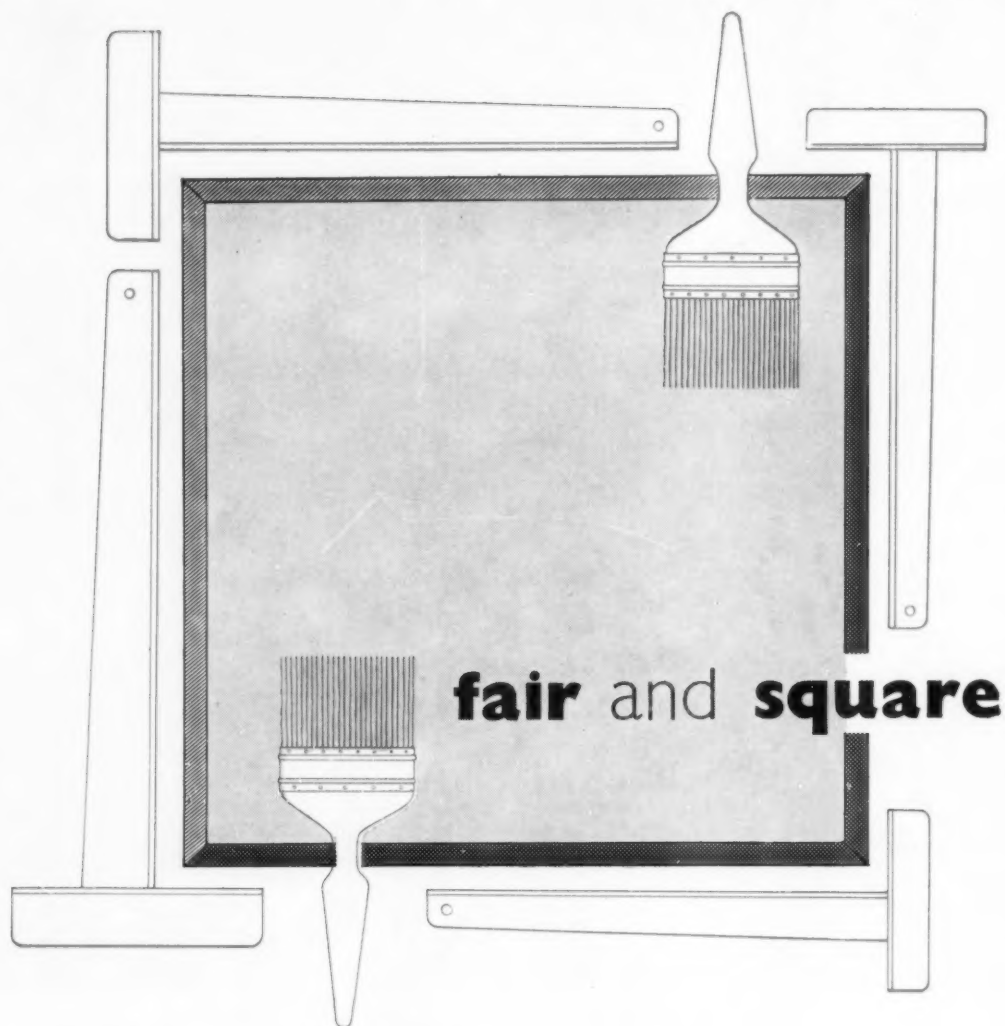
The 14 clear and clean colours of the ACCOFLEX range enable Architects to plan endless colour harmonies, and the flexibility of the tile enables it to be laid over any sub-floor—even suspended wood boards.

Of special interest in the Birds installation is the facsimile of their trade mark in multi-tile ACCOFLEX. Full details are now available. Write for the Accoflex Colour Range leaflet No. 321.

\* British Registered Trade Mark  
734,048 Armstrong Cork  
Company Ltd., Registered Users.

**Armstrong ACCOFLEX<sup>\*</sup> Flooring**

ARMSTRONG CORK COMPANY LIMITED, Flooring Department, BUSH HOUSE, ALDWYCH, LONDON, W.C.2. Telephone: COVent Garden 1101



When you first see a ceiling constructed with ASBESTOLUX ceiling panels you are struck by its crispness and accuracy. Years later, you will still admire it for the same reasons. The qualities of an ASBESTOLUX ceiling do not disappear with time: they are there, like the ceiling itself, for good—not forgetting that vital quality you cannot see, the ability to give up to 4 hours fire protection to floors.

ASBESTOLUX precision-cut ceiling panels have a fine, smooth surface, with bevelled edges. They are made to a tolerance of plus nil minus  $\frac{1}{16}$ ", every one jig-checked for squareness before dispatch.

They are available in  $\frac{1}{2}$ " and  $\frac{3}{8}$ " thickness in the following sizes:

4'x4' 4'x2' 3'4"x2' 3'x2' 2'8"x2' 2'x2'



# dry construction needs ASBESTOLUX

REGD

**non-combustible**

**PRECISION-CUT CEILING PANELS**

THE CAPE ASBESTOS CO. LTD.

114 & 116 PARK STREET, LONDON, W.1 GROsvenor 6022

and at Floor D National Buildings St. Mary's Parsonage, Manchester, 3 Tel: Deansgate 6016 · Eagle Buildings, 217 Bothwell Street, Glasgow, C.2 Tel: Central 2175  
246a Corporation Street, Birmingham, 4 Tel: Central 8168

TA9081

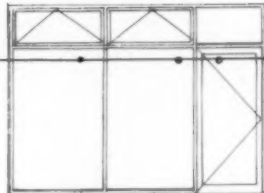
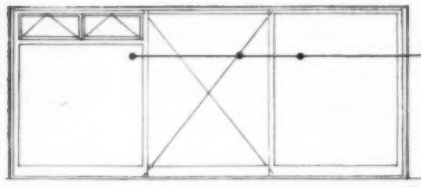


PRE-CAST CONCRETE COPING

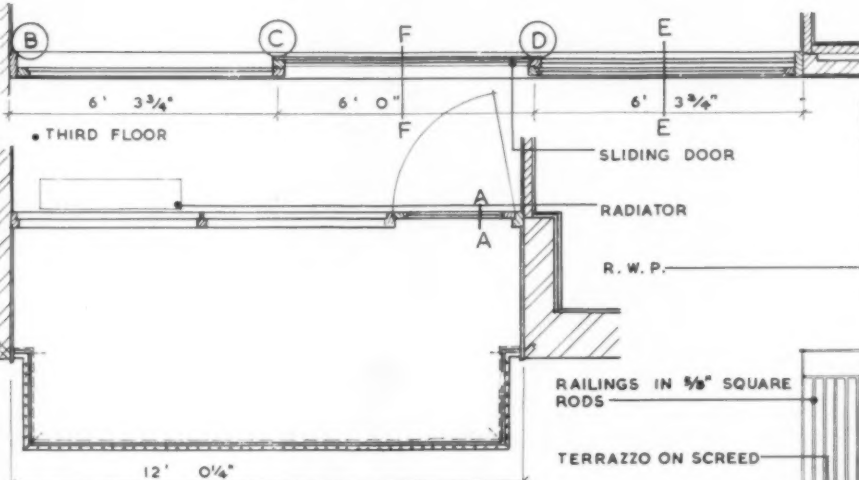
FACING BRICKS

1/4" P.P. GLASS

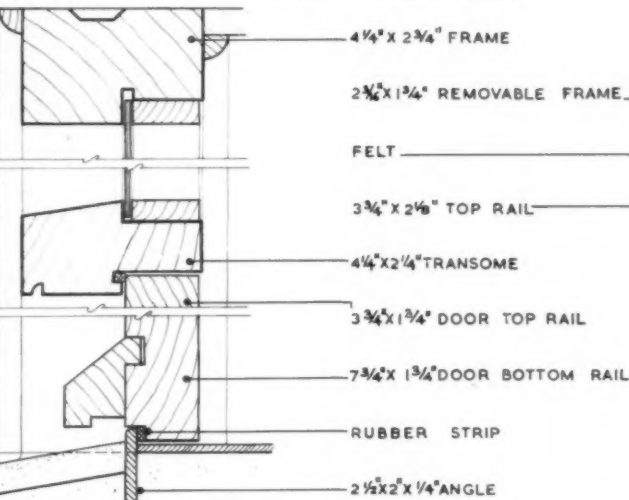
1/4" G.W. ROUGH CAST GLASS



ELEVATIONS • THIRD FLOOR BALCONY WINDOW • 1/8"-1'0" • FIRST & SECOND FLOORS

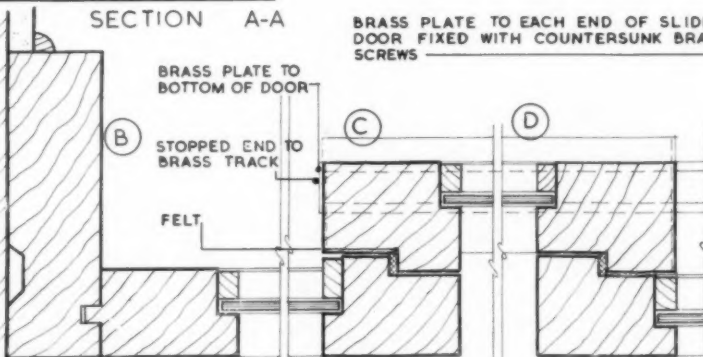


PLANS • 1/4" 1'0" • FIRST & SECOND FLOORS

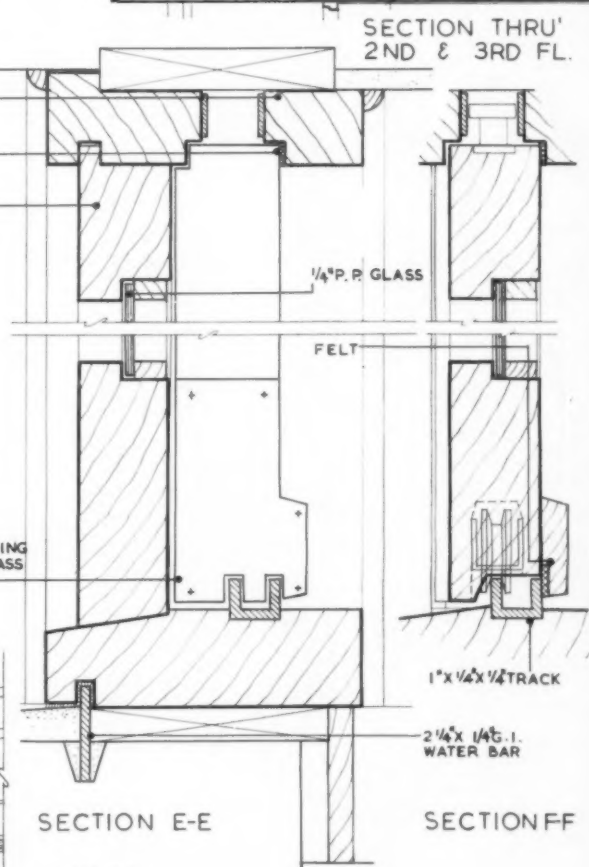


SECTION A-A

BRASS PLATE TO EACH END OF SLIDING DOOR FIXED WITH COUNTERSUNK BRASS SCREWS



PLAN DETAILS • 1/4 F.S.



SECTION THRU' 2ND & 3RD FL.

SECTION E-E

SECTION F-F

• 1/4 F.S.



WINDOW DETAILS: FLATS, CHELSEA, LONDON  
ARCHITECTS: EDWARD ARMSTRONG & FREDERICK MACMANUS

# ELECTRIC LIGHTING

## INDUSTRIAL LIGHTING INSTALLATIONS

It is sometimes not realised that the recommended minimum values of illumination quoted in L5, Table 1, are necessary at *all* production times irrespective of the state of the weather or the time of year. If the day lighting falls below the required level it must be possible to add sufficient electric lighting to make good the deficiency. The higher the illumination levels required by the work or processes undertaken, the more often will electric lighting be required, and the more important will it become to design the building with this aspect of the problem in mind.

### Conventional Single-storey Factories

In buildings of this type it is the usual practice to suspend the lighting fittings from the roof trusses, but every endeavour should be made to avoid placing the fittings under the roof lights where they may seriously obstruct the daylight and become excessively glaring during the hours of darkness when seen against the black glazed areas. The underside of the roof should be lined with light material—e.g. insulation board—and fittings selected which emit an appreciable proportion of their light upwards on the unglazed and lined areas of the roof.

### High Bay Workshops

This type of workshop common to foundries and heavy engineering works is often lighted by a number of powerful lamps mounted high up in fittings which concentrate the light downwards to avoid loss of light on the upper parts of the walls. The effect, however, is depressing, and gives rise to harsh shadows, with poor illumination on vertical surfaces and within the work generally, and a strong tendency to glare (see Fig. 1a). Where the surroundings are reasonably clean and lighter colours can be employed, a considerable improvement in working conditions is possible by mounting the lamps in dispersive reflector fittings (see L2). The loss of light due to absorption by the wall surfaces will be offset by the increased light output of these fittings, and the light reflected from the walls on to the working area will soften shadows, reduce the risk of glare, and provide better illumination of vertical and internal surfaces (see Fig. 1b).

It is strongly recommended that wherever possible, the high level lighting be supplemented by side lighting directed inwards and downwards from lamps mounted below the gantry crane. Fluorescent lamps are particularly effective for this purpose, and even without diffusing screens will conform to the statutory limitation on the brightness of fittings mounted less than 16 ft. from the floor; (Fig. 1c).

### Maintenance of High Mounted Fittings

There is an increasing tendency to use fluorescent lamps in very high interiors, especially cold cathode lighting due to its high nominal life—15,000 hours before replacement becomes necessary. This does not however justify inadequate means of access to high mounted fittings, as the frequency with which they need attention is determined by the rate of accumulation of dirt rather than the necessity for replacing lamps. Fittings are frequently mounted so as to be maintained from the travelling crane, but it is far better to provide independent access—e.g. by catwalk or cradle—to ensure adequate attention to the lighting.

### Multi-storey Factories

With the exception of roof lights on the top floor and below light wells, daylight in multi-storey factories is provided by side windows, which cannot be relied upon for satisfactory illumination beyond 10 to 15 ft. into the building (see Fig. 2). The rooms or workshops being generally low in relation to their width, almost continuous electric lighting will be needed over substantial areas in the centre

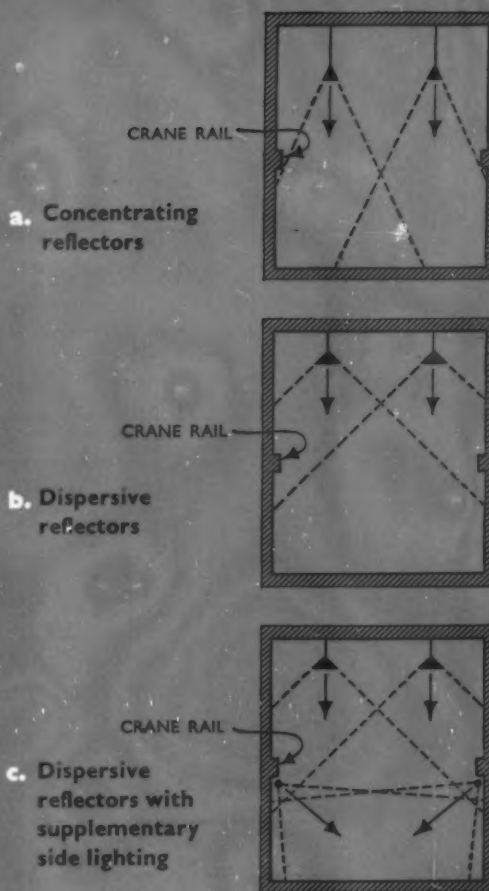
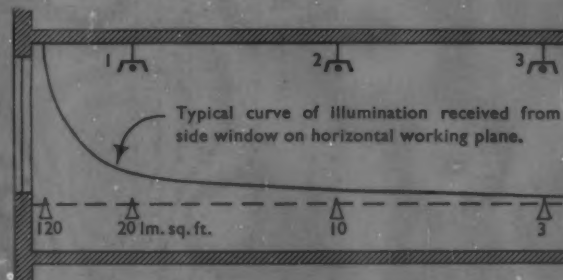


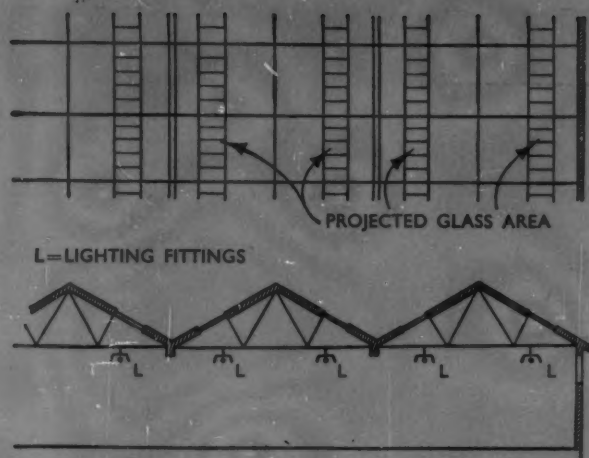
Fig. 1 High bay workshop lighting



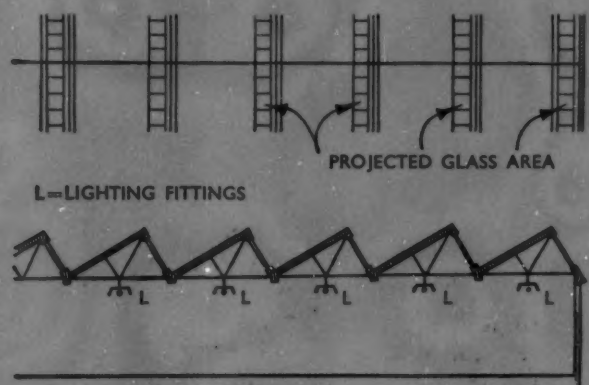
Figures 1, 2, 3 denote order of lighting up as daylight fades, each row of fittings being independently switched.

Fig. 2 Supplementary lighting

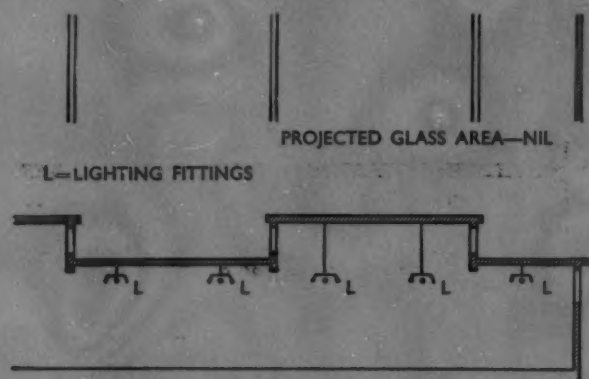
L.6



a. Double pitch roof



b. Small pitch saw tooth roof



c. Monitor roof

**Fig. 3 Roof sections**  
in relation to electric lighting

of large interiors. Owing to the comparatively low ceiling height, lamps of high wattage cannot normally be used, and a large number of lighting fittings may be required since the spacing-mounting height ratio must remain  $1\frac{1}{2}$  to 1 (see L5).

Fluorescent lamps give the most satisfactory results under these circumstances and are widely used in this type of interior, since their light blends in an acceptable manner with that in the window-lighted areas, and their linear form lends itself to straightforward and efficient layouts. Although the brightness of the individual lamps is low, no relaxation of the normal shielding requirements is permissible since serious glare may arise from such a large area of visible light sources. Switching should be arranged so that the electric lighting of the centre areas of any large room or workshop can be used independently of the lighting near the windows.

#### The Integration of Day Lighting and Electric Lighting

In the design of single-storey factories, the roof shape, including trusses, beams and glazing, must be regarded as part of the electric lighting installation—a kind of overall lighting fitting, the efficiency of which has a notable effect on the illumination provided after dark and during periods of inadequate daylight. The desired uniformity of lighting can be maintained throughout the whole working period only when both day and electric light are themselves uniformly distributed, and this requires that roof lights and electric lighting must be planned in relation to each other as well as to the production area. Fig. 3 shows three systems of roof design which provide reasonably uniform day lighting, though with different daylight factors; (a) is the least satisfactory for electric lighting, whether supplementary or after dark: much light will be lost through the roof glazing unless closed top reflectors are used when an unpleasant tunnel effect will probably be found. Better results will be obtained from (b) where the visible areas of glazing are less but the natural light comes from one direction only, and from the electric lighting aspect the roof is still 'wasted'. Monitor type roofs as (c) not only give reasonably uniform daylight, but provide the clear reflecting surfaces necessary to give uniform electric lighting as well. The appearance of this interior will also be better than in the other examples, owing to its all-over lightness when illuminated and the small visible area of glazing. Moreover both sides of the vertical glazing are easily cleaned: other types are difficult to reach and remain uncleaned in consequence. Although switching control may not always be decided by the architect, automatic photo-cell control should be considered, as its use will affect the wiring layout. This system, now developed to full reliability and great flexibility, is the only certain way of ensuring that the designed integration of day and electric lighting will, in fact, take place.

#### The Structure and the Services

Consideration should always be given to the possibility of using the structure to house or support lighting fittings, to screen them, or to provide access to them for maintenance. Concrete roofs, in particular when of the barrel or vaulted type, are of great assistance: the light, clean ceiling so formed makes an excellent reflector, and may even permit the use of unshielded fluorescent lamps provided that they are normally seen against the bright ceiling. It is important, however, with shell concrete vaults to incorporate fixings for conduit, fittings and other services before concreting in order to avoid the labour and cost of cutting away, and the loss of strength which may result therefrom.

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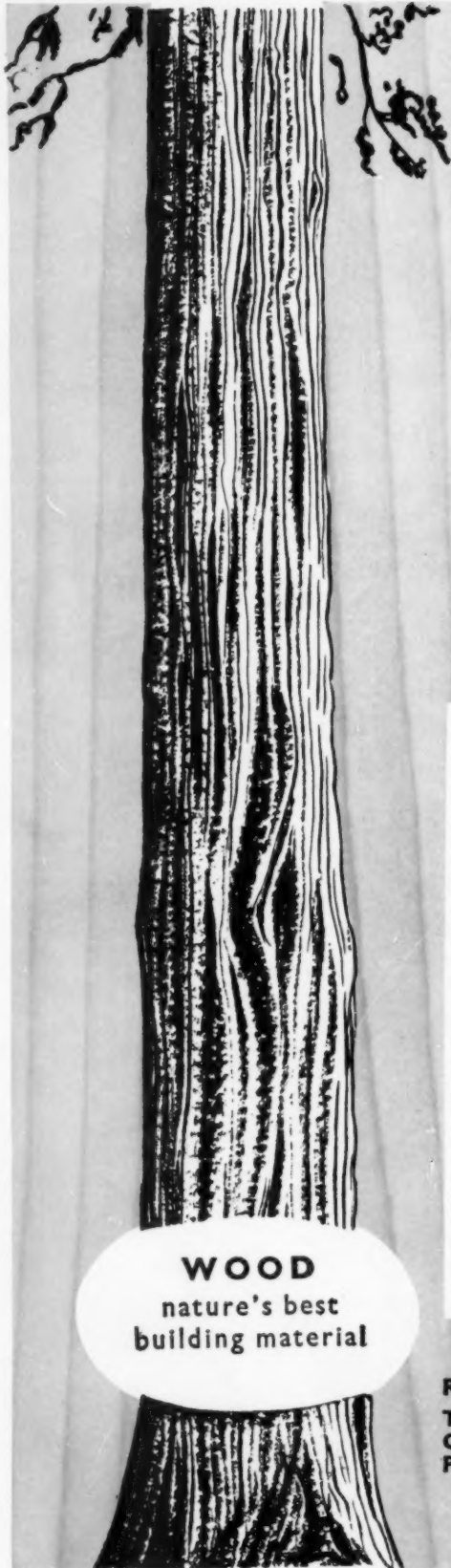
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DATE OF ISSUE 7 JUNE, 1956



Notes below give basic data of contracts open under locality and authority which are in a bold type. References indicate: (a) type of work (b) address for application. Where no town is stated in the

## CONTRACT • NEWS •

### OPEN BUILDING

**ALCESTER R. C.** (a) Erection of four houses at Sambourne. (b) Council's Surveyor, Council Offices. (c) 2gns. by cheque payable to Council. (e) June 27. **BACUP B.C.** (a) Conversion of Carlton House, Todmorden Road, into two flats. (b) Borough Engineer, Stubbylee Hall. (c) 2gns. (e) June 18.

**BEBINGTON B.C.** (a) Erection of 112 dwellings on the Mill Park estate, Eastham. (b) Borough Engineer, "Brakenwood," Higher Bebington. (c) 3gns. (e) June 22.

**BEDFORDSHIRE EDUCATION COMMITTEE.** (a) Structural alterations to existing buildings at North Bedfordshire College of Further Education, Cauldwell Street and erection of a three classroom temporary hutment at Kempston secondary school. (b) County Architect, Shire Hall, Bedford. (d) June 12.

**BROMLEY B.C.** (a) Erection of 28 old people's bungalows at Springfield Road. (b) Borough Engineer, Municipal Offices, together with details of similar schemes undertaken and names of two independent persons to whom reference can be made concerning such schemes. (c) 2gns. (d) June 16.

**CARLISLE C.C.** (a) Erection of 52 flats, 2 bungalows and 2 houses on various sites. (b) City Surveyor, 18 Fisher Street. (e) June 26.

**CROYDON B.C.** (a) Conversion of two houses in Sydenham Road, into 16 units of living accommodation for blind people. (b) Borough Engineer, Council Offices. (e) July 3.

**DEVIZES R.C.** (a) Erection of four houses and four bungalows, vehicle pull-in and sewage treatment plant, together with ancillary site works, at Spaniel's Bridge, Coate, Bishop's Cannings. (b) Edwards and Webster, 22 St. John Street. (c) £1. (e) June 22.

**DEVON C.C.** (a) Erection of woodwork room at Okehampton Grammar School. (b) County Architect, 97 Heavitree Road, Exeter. (c) 2gns. by cheque payable to Council. (d) June 15.

**EIRE—LONGFORD C.C.** (a) Proposed erection of (1) Main hospital block, (2) staff home block, (3) chapel block, (4) out-patients department and maternity unit, (5) administration block, (6) mortuary boiler-house and garages, (7) residences and ancillaries, (8) site works, including site development, site boundaries, main roads, main ducts, main drains, water mains and domestic drains, for New County Hospital. (b) Messrs. A. Edward Smith and Co., 4 Wilton Place, Dublin, on production of a receipt from the Council for a deposit of £50. (e) July 26.

**FLINTSHIRE C.C.** (a) Erection of A.F.S. garage at Fire Service headquarters, Connah's Quay. (b) County Architect, Llwynegryn, Mold. (c) 1gn. (e) June 18.

**GREAT OUSE RIVER BOARD.** (a) Erection of a detached two-storey office at Wisbech Road, King's Lynn. (b) Chief Engineer, Elmhurst, Brookland Avenue, Cambridge. (e) June 25.

address it is the same as the locality given in the heading (c) deposit (d) last date of application (e) last date and time for submission of tenders. Full details of contracts marked \* are given in the advertisement section.

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BULWELL — NOTTINGHAM

**HAILSHAM R.C.** (a) Erection of a garage for public sewer vehicles, concrete yard surfacing, and erection of a boundary wall and fences at the Council Depot, Leap Cross, Hellingly. (b) Council's Surveyor, Cortland. (c) £2. (e) June 19.

**HALESOWEN B.C.** (a) Contract No. 16. Erection of 10 bungalows at Howley Grange estate. (b) Messrs. J. C. T. Cole and Partners, Central Buildings, Long Lane, Blackheath, near Birmingham. (c) 2gns. (d) June 9.

**HORSHAM U.C.** (a) Erection of (Site 1) 14 houses and (Site 2) 16 houses on the Needles Farm estate. (b) Council's Engineer, Council Offices, Horsham Park. (c) 2gns. (e) June 18.

**KIRKBY-IN-ASHFIELD U.C.** (a) Erection of four pairs type B2 dwellings and one block type K4 flats in Skegby Road, and 19 pairs type L dwellings at Kingsway. (b) Council's Surveyor, Public Offices. (c) 3gns. (e) June 18.

**LEEDS C.C.** (a) Supply and erection of constructional steelwork required in extensions to Torre Road Bus Garage. (b) Transport General Manager, 1 Swinegate. (e) June 18.

**LEEDS REGIONAL HOSPITAL BOARD.** (a) Carrying out alterations to provide an infant feed preparation department at Castle Hill Hospital, Cottingham, East Yorkshire. (b) Board's Architect, Park Parade, Harrogate, Yorkshire. (c) 2gns. (d) June 12. (e) July 4.

**LEICESTER C.C.** (a) Erection of a classroom block at Groby school. (b) County Architect, 123 London Road. (c) 2gns. (e) July 2.

**LINCOLN C.C. — PARTS OF KESTIVEN.** (a) Erection of a pair of staff houses at Kesteven Farm Institute, Caythorpe. (b) County Architect, County Offices, Sleaford. (e) July 2.

**LONDON—EALING B.C.** (a) Erection of 2 blocks containing 36 flats and site works in Wilmere Drive, Fairview Estate, Northolt. (b) Borough Surveyor, Town Hall, W.5. (c) £2. (e) June 22.

**LONDON—GREENWICH B.C.** (a) Conversion of No. 26 Kidbrooke Grove, Blackheath, S.E.3, into six self-contained flats. (b) Borough Engineer, Town Hall, Greenwich High Road, S.E.10, together with particulars of recent works executed by applicants. (d) June 26.

**NARBERTH.** (a) Erection of the Narberth Town Hall. (b) Hon. Secretary, Bank House, St. James Street.

**N. IRELAND—CO. FERMANAGH** (a) Carrying out proposed adaptations, alterations and demolitions to premises, Tubrid, Kesh, Co. Fermanagh, to form byres, calf house, deep litter house, stores, farm manager's dwelling house, etc. (b) W. Ivan Lynch, 2 Shipquay Street, Londonderry, or F. H. Wright and Partners, 79 Botanic Avenue, Belfast. (c) 5gns. (e) June 28.

**N. IRELAND—NORTHERN IRELAND HOSPITALS AUTHORITY.** (a) Erection of a new physiotherapy department, new twin operating theatre unit and sundry ancillary works at Lurgan and Portadown Hospital. (b) Messrs. Thomas T. Houston and Co., 26 College Gardens, Belfast. (c) 5gns. (e) July 31.

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**N. IRELAND — NORTHERN IRELAND HOUSING TRUST.** (a) Demolition of old buildings and erections of 20 dwellings, together with ancillary and engineering works at Moat Street, Donaghadee, Co. Down. (b) General Manager, Northern Ireland Housing Trust, 12 Hope Street, Belfast. (c) £3. (e) June 20.

#### NORTH RIDING EDUCATION COMMITTEE.

(a) Erection of Wensleydale modern school, at Leyburn. (b) F. Barraclough, County Hall, Northallerton, or W. B. Edwards and Partners, 5-6 Claremont Buildings, Eldon Place, Newcastle-on-Tyne, 1. (e) July 2.

**NOTTINGHAM C.C.** (a) Carrying out alterations to the Reception Centre, Hucknall Road. (b) City Engineer, The Guildhall. (c) £2. (e) June 22.

**POOLE B.C.** (a) Erection of (1) four pumping station superstructures, (2) administration building complete, (3) store and workshop complete, and (4) main entrance gateway, at Broadstone Sewage Disposal Works, Contract No. 2. (b) Messrs. J. D. & D. M. Watson, 18 Queen Anne's Gate, S.W.1. (c) 3gns. by cheque payable to Corporation. (e) June 19.

**READING B.C.** (a) Erection of two pairs of three-bedroomed houses and one block of six aged persons bungalows at "Parkhurst", Bath Road. (b) Borough Architect, Town Hall. (c) 2gns. by cheque payable to Corporation. (e) June 28.

**ROWLEY REGIS B.C.** (a) Erection of 100 houses on the Tivdale Hall estate. (b) Council's Architect, Municipal Buildings, Old Hill, Staffs. (c) 3gns. (e) July 5.

**RUSHDEN U.C.** (a) Erection of 38 houses and 12 flats at Hayden Road site. (b) Council's Engineer, Council Buildings. (e) June 19.

**ST. ALBANS C.C.** (a) Conversion of one shop into two shops and fitting of shop fronts and internal work to Nos. 10, 22/1, 22/2 and 24, High Oaks. (b) City Engineer, 16 St. Peter's Street. (c) 2gns. (e) June 25.

**SCOTLAND—HAMILTON.** (a) Erection of 36 houses at Wylie Street. All or separate trades. (b) Scottish Special Housing Association Ltd., 15/21 Palmerston Place, Edinburgh, 12.

**ULVERSTON U.C.** (a) Erection of (1) small extension to shop store, (2) block of 7 garages, in Rydal Road. (b) Housing Architect, P.O. Box No. 1, Town Hall. (c) 2gns.

#### WEST RIDING OF YORKSHIRE C.C.

(a) (1) Erection of scullery at Bingley Cottingley primary school, (2) provision of additional toilet accommodation at Batley Purlwell infants' school, (3) dismantling of kitchen equipment and provision of scullery and cloakroom accommodation at Hemsworth Kinsley secondary school, (4) improvements to washing-up facilities at Hebden Royd, Wadsworth Old Town school, (5) improvements to washing-up facilities at Owston Skellow infants' school. (b) For (1) and (5) County Architect, and (2) and (3) and (4) to Divisional Architect, Bishopgarth, Westfield Road. (c) 1gn. for (1). (e) June 25.

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**WAKEFIELD R.C.** (a) Erection of 38 houses at Sharlston. (b) Council's Engineer, Council Offices, 18 St. John's North. (c) June 16.

**WALSALL B.C.** (a) Erection and completion of alterations and additions to Palfrey primary school. (b) Messrs. Lavender, Son and Close, 50 Bradford Street, immediately. (c) 3gns. (e) June 29.

## PLACED

Notes on contracts placed state locality and authority in bold type with (1) type of work, (2) site, (3) name of contractor and address, (4) amount of tender or estimate. † denotes that work may not start pending final acceptance, or obtaining of licence, or modification of tenders, etc.

**ABERSYSSWG, MON.** (1) Pithead baths, for N.C.B. (2) McLaren Colliery. (3) W. and A. Davies Ltd., Abersychan, Pontypool, Mon. (4) £62,155.

**LINCOLNSHIRE C.C.** (1) Robert Pattinson secondary school. (2) North Hykeham. (3) F. R. Ecclesham Ltd., 468 High Street, Lincoln. (4) £169,746.

**LONDON, W.** (1) Eight storey office block. (2) Portman Square. (3) Higgs and Hill Ltd., South Lambeth Road, London, S.W.8. (4) £500,000.

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**ESSEX C.C.** (1) School. (2) Great Wakering. (3) Thos. Bates and Son Ltd., Harold Wood, Essex. (4) £88,351. (1) Shrub End primary school. (2) Colchester. (3) Joseph Moss and Sons Ltd., Colchester. (4) £46,137.

**PETERBOROUGH JOINT EDUCATION BOARD.** (1) Second instalment, technical college. (3) B. Stokely Ltd., Eastfield Road, Peterborough.

**ESSEX C.C.** (1) Hostel. (2) Chigwell. (3) William Blood Ltd., 43 Durham Road, London, S.E.11. (4) £54,900.

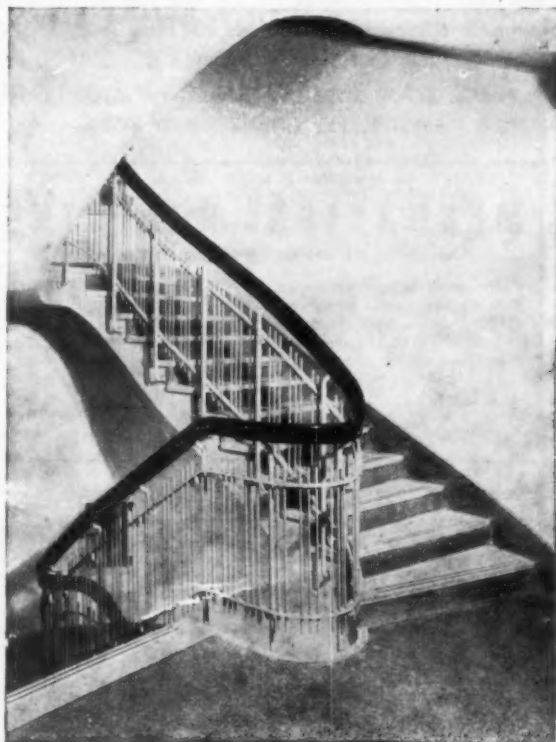
**ISLE-OF-ELY C.C.** (1) Secondary school. (2) Littleport. (3) S. S. Ambrose and Son, Ely. (4) £100,783. (1) Queen's secondary school. (2) Wisbech. (3) Bettles Building Co. Ltd., 80 Alma Road, Millfield, Peterborough. (4) £162,913.

**LINGFIELD, SURREY.** (1) Mormon temple. (2) Newchapel. (3) Kirk and Kirk Ltd., Upper Richmond Road, London, S.W.15. (4) £400,000.

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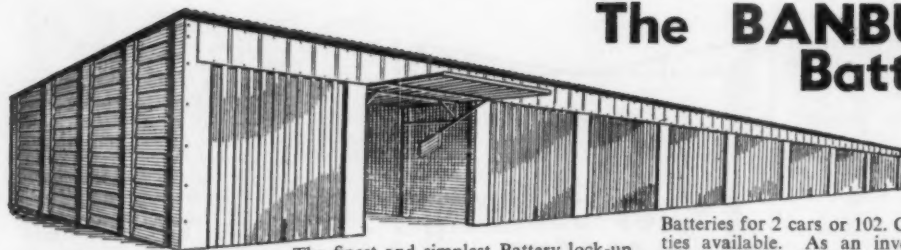
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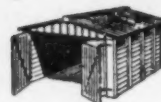
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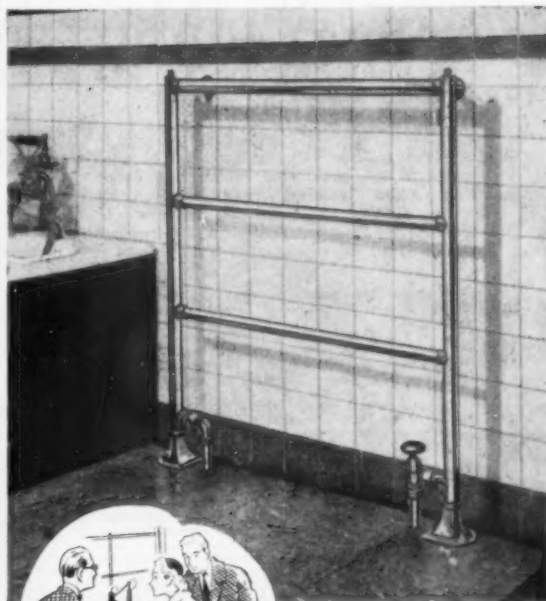
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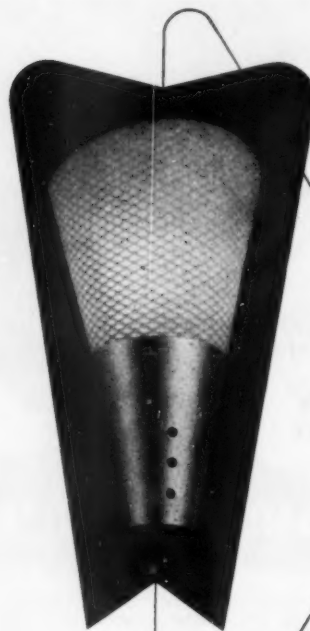
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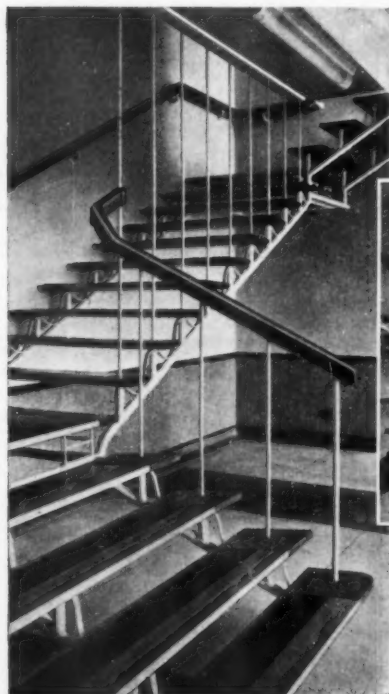
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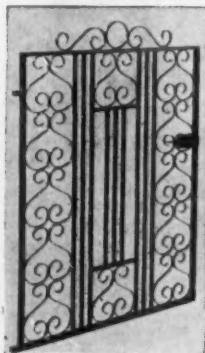
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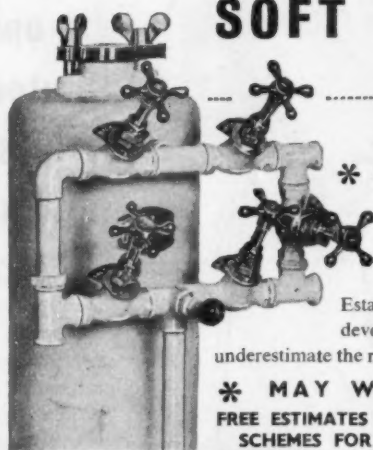
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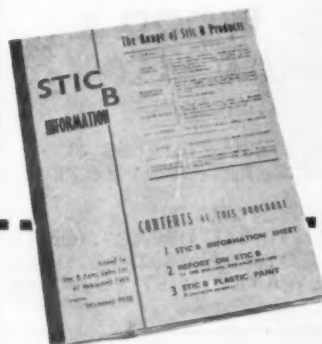


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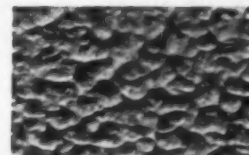
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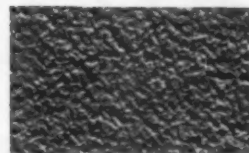
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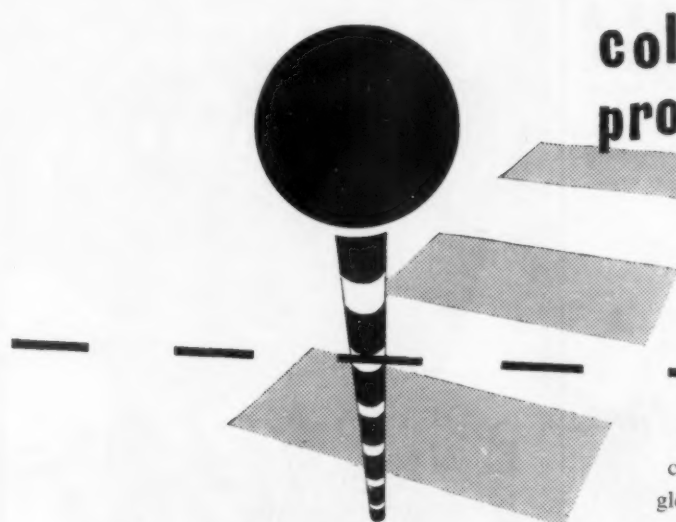
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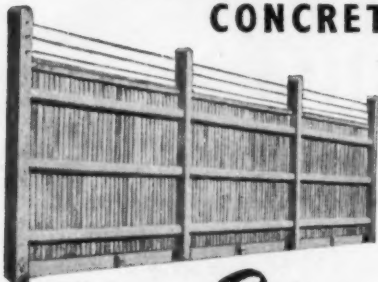
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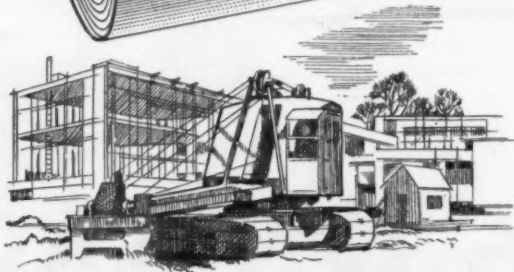
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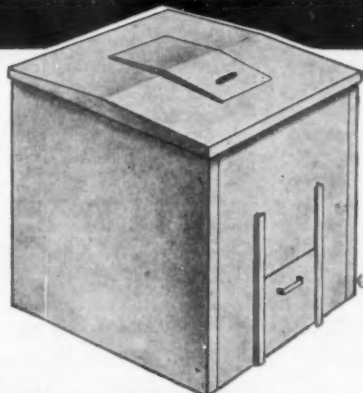
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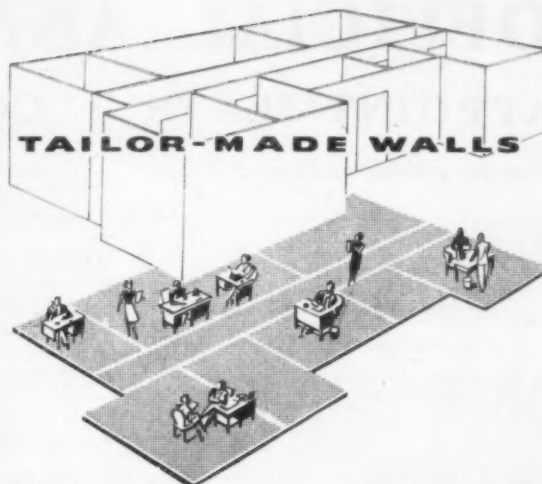


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The appointment will be within the Joint Negotiating Committee for Chief Officers, Deputies and other Senior Officers' Scale E (£1,515 rising by annual increments of £55 to £1,735 per annum), at a commencing salary according to experience.

Applicants must be Associate Members of the R.I.B.A. or hold an equivalent qualification, and should have an extensive knowledge and experience of design, administration, and organisation of housing schemes.

The post is permanent, subject to a medical examination, to three months' notice on either side, and to the provisions of the Local Government Superannuation Acts, 1937/53, and the Birmingham Municipal Officers' Widows' and Orphans' Pensions Scheme.

Applications, endorsed with the heading of the post, stating age, present position and salary, qualifications and experience, together with the names of two persons to whom reference can be made, should reach the undersigned not later than 29th June, 1956.

Canvassing disqualifies.

A. G. SHEPPARD FIDLER,  
City Architect.  
Civic Centre,  
Birmingham, 1. [2401]

#### COUNTY BOROUGH OF GREAT YARMOUTH

##### SCHOOLS ARCHITECT'S DEPARTMENT

APPLICATIONS are invited for the appointment of a Temporary Senior Assistant within Grade A.P.T. VI (£880 - £1,080). The post is superannuable and subject to the National Conditions of Service.

Candidates must be Associate Members of the R.I.B.A. and should have extensive experience in design and construction of schools. Previous knowledge of schools for partially blind and deaf children will be an advantage.

Housing accommodation will be made available if required and the post is guaranteed for a minimum of two years.

Applications stating age, qualifications, experience, with details of past and present appointments, together with the names of two referees, should reach the Schools Architect, 22, Euston Road, Great Yarmouth, by 11th June, 1956.

D. G. FARROW,  
Chief Education Officer.  
22, Euston Road,  
Great Yarmouth. [2388]

#### LONDON COUNTY COUNCIL

##### ARCHITECT'S DEPARTMENT

VACANCIES exist for GRADE III ARCHITECTS (salary up to £987, with starting point according to qualifications and experience) to take part in a programme of improvement works on existing Council properties. A.R.I.B.A. preferred.

Particulars and application form, returnable by 22nd June, from The Architect (AR/EK/IMP/3), County Hall, S.E.1. (1030). [2415]

APPLICATIONS are invited for the appointment of CLERK OF WORKS. Salary according to experience. Contract period approximately one year commencing immediately. Job involves supervision of an Administration Block valued at £50,000 of high standard of finish, and control of Agricultural details and finishes to various large plant buildings on an Aero-testing site now under construction. Applications, together with either copies of two recent testimonials or the names and addresses of two referees.—Box 2208, c/o A. & B. N. [2393]

### APPOINTMENTS—contd.

#### CITY OF BIRMINGHAM

##### CITY ARCHITECT'S DEPARTMENT

APPLICATIONS are invited for the following appointments:—

Quantity Surveyors — Grade A.P.T. IV — £710/£885 per annum  
Quantity Surveyor — Grade A.P.T. III — £640/£765 per annum  
Quantity Surveyor — Grade A.P.T. I — £550/£630 per annum

Applicants for Grade A.P.T. IV must have passed the Final Examination, and for Grades A.P.T. I and A.P.T. III, the Intermediate Examination of the R.I.C.S. (Quantity Section), or hold equivalent qualifications. The commencing salaries in the grades will be according to capabilities and experience.

The posts are permanent, subject to a medical examination, to one month's notice on either side, and to the provisions of the Local Government Superannuation Acts 1937/53, and the Birmingham Municipal Officers' Widows' and Orphans' Pensions Scheme.

Applications, endorsed with the heading of the post, setting out present position and salary, qualifications and experience, together with the names of two persons to whom reference can be made, should reach the undersigned not later than 23rd June, 1956.

Canvassing disqualifies.

A. G. SHEPPARD FIDLER,  
City Architect.  
Civic Centre,  
Birmingham, 1. [2402]

#### GOVERNMENT OF BECHUANALAND

##### ASSISTANT ARCHITECT

DUTIES include preparation of preliminary, working and detail drawings and specifications for all work on building programmes.

Contract appointment for three years. Salary scale £804 to £1,707 per annum, including cost of living and special allowances. Rehabilitation grant on satisfactory completion of contract up to £37 10s. for each three months of resident service.

An allowance for education outside the High Commission Territories of £50 per annum for each child with a maximum of £120.

Furnished quarters at rental of 10% of salary. Free passages for officer and wife, and assistance towards children's passages. Four days leave for each completed month of resident service.

Candidates not over 45 years, should be A.R.I.B.A., with minimum of five years experience. Write Director of Recruitment, Colonial Office, London, S.W.1., giving age, qualifications and experience, quoting BCD.112/76/08. [2388]

#### SHEFFIELD REGIONAL HOSPITAL BOARD

APPLICATIONS are invited from persons with experience in a builder's or quantity surveyor's office for the post of SURVEYOR'S CLERK in the Architectural Department of the Board's Headquarters. Salary scale is at present £400 (at age 24 or over) x 15(4) x 20(5) — £560, and an increase of 6% is anticipated. The appointment is subject to the Whitley Council terms and conditions of service, to the National Health Service (Superannuation) Regulations and to one month's notice on either side. Applications stating age and experience, together with the names of three referees, should reach the Secretary to the Board, Fulwood House, Old Fulwood Road, Sheffield, 10, by 23rd June, 1956. [2407]

#### STRUCTURAL ENGINEER

required

with experience in prestressed concrete, to take charge of small drawing office, and assist in development work.

Salary £1,000 to £1,250 according to experience.

Applicants should send details of qualifications and experience to:—

UDALLS, West Quay Road, Southampton. [2409]

### APPOINTMENTS—contd.

#### GOVERNMENT OF SIERRA LEONE

##### ARCHITECT (TEMPORARY) PUBLIC WORKS DEPARTMENT

TO prepare plans and specifications for buildings of all types.

Contract appointment for 18-24 months in first instance. Salary range £996 - £1,857 p.a. plus gratuity £25 - £37 10s. for each three months' service.

Free passages for officer, wife and two children or £75 allowances for each of two children maintained outside Sierra Leone.

Seven days leave for each month of resident service. Quarters, if available, rental 8½% of basic salary.

Candidates must be A.R.I.B.A. and/or hold a degree in Architecture.

Write Director of Recruitment, Colonial Office, London, S.W.1., giving age, qualifications and experience, quoting BCD.112/15/011. [2389]

#### URBAN DISTRICT COUNCIL OF CORBY

##### JUNIOR ARCHITECTURAL ASSISTANT Grade A.P.T. I (£530 - £610)

APPLICATIONS are invited for the above appointment in the Architectural Section of the Engineer and Surveyor's Department.

Applicants must have passed the R.I.B.A. Intermediate Examination, or its equivalent at one of the recognised schools of architecture, and preference will be given to those who have had practical office experience in housing and general architecture.

The provisions of the Local Government Superannuation Acts 1937/53, will apply to this appointment.

Housing accommodation will be made available to the successful candidate if married.

Forms of application may be obtained from the undersigned, to whom they should be returned not later than the first post on Saturday, 23rd June, 1956. Testimonials will be required only from applicants selected for interview.

G. B. BLACKALL,  
Clerk of the Council.  
Council Offices,  
CORBY, Northants.  
28th May, 1956. [2394]

#### SHEFFIELD REGIONAL HOSPITAL BOARD

APPLICATIONS are invited for the post of ASSISTANT QUANTITY SURVEYOR. Salary scale is at present £640 x 25(4) 30(4) x 35(2) — £930, and an increase of 6% is anticipated. Applicants should preferably hold the R.I.C.S. qualification. The appointment is subject to the Whitley Council terms and conditions of service, to the National Health Service (Superannuation) Regulations, and to one month's notice on either side. Applications, stating age, qualifications, and previous appointments, together with the names of three referees, should reach the Secretary to the Board, Fulwood House, Old Fulwood Road, Sheffield, 10, by 23rd June, 1956. [2406]

#### BOROUGH OF LOUTH

##### APPOINTMENT OF ARCHITECTS

LOUTH Borough Council require the services of a firm of Architects to undertake the preparation of plans, drawings, specifications, etc. and the subsequent erection of houses in connection with their current housing development.

Further particulars and forms of application may be obtained from the undersigned to whom completed applications should be returned not later than 23rd June, 1956.

WALTER HOLT,  
Town Clerk.  
Town Hall,  
Louth.  
1st June, 1956. [2414]

## APPOINTMENTS—contd.

## COUNTY BOROUGH OF NEWPORT.

## BOROUGH ARCHITECT'S DEPARTMENT.

**A**PPPLICATIONS are invited for the post of **BUILDING SURVEYOR**, Grade 5 (£795 x 35—£970). Candidates must be Associates of the Royal Institute of Chartered Surveyors. Housing Accommodation will be provided if necessary. Forms of application from the Borough Architect, Civic Centre, Newport, Mon., to whom they must be returned not later than Wednesday, 20th June, 1956. [2404]

## COMPETITION

## ARCHITECTURAL COMPETITION FOR NEW COLLEGE BUILDINGS, FAISLEY, SCOTLAND.

**T**HE Governors of the above College invite Architects registered under the Architects' Registration Acts and resident in Great Britain, Northern Ireland or the Republic of Ireland to submit in competition designs for new Technical College buildings in Paisley, Scotland.

Assessor: Professor R. Gardner - Medwin, F.R.I.B.A., M.T.P.I.

Premiums: (1) £1,500; (2) £1,000; (3) £500. Last day for submitting designs: Noon on 27th February, 1957. Last day for questions: 3rd September, 1956.

Conditions may be obtained from J. & A. Gardner, Clerks to the Governors, 3 County Place, Paisley, Renfrewshire, on payment of a deposit of £2. An applicant for the conditions must state his registration number or the number of the receipt issued to him by the Architects' Registration Council in respect of the admission fee. [2412]

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## ARCHITECTURAL APPOINTMENTS VACANT

**DORSET COUNTY COUNCIL** require **ASSISTANT ARCHITECT** (Scale £690 x £30—£840 per annum).

Candidates must be A.R.I.B.A. and experience of Education buildings would be an advantage but not essential.

Application forms from the Clerk County Hall, Dorchester, to be returned by 20th June. [2413]

**ARCHITECTURAL ASSISTANT** of Intermediate to Final standard with previous office experience required for busy general practice. The practice is expanding and offers excellent prospects to the right man. Travelling expenses will be paid to those applicants selected for interview. — Write, stating age, experience, and salary required to Eard, Badger & Harrison, Chartered Architects, Scholars Lane, Stratford-on-Avon. [2395]

**ASSISTANT** required in busy practice in West End, in early twenties, about Intermediate R.I.B.A. Standard. Excellent opportunities for gaining all-round experience.—Box No. 1685, c/o A. & B. N. [0636]

**THE BOROUGH OF HAMPSTEAD** require **Junior Architectural Assistant**. Salary — Higher General Division (at age 18 — £300 rising to a maximum of £640, plus London weighting). Medical examination. No housing provided. — Applications, suitably endorsed, giving the names of three referees, to the Town Clerk, Town Hall, Haverstock Hill, N.W.3. Closing date 15th June, 1956. [2391]

**THE TIMBER DEVELOPMENT ASSOCIATION** LIMITED have vacancies for Assistant Architects and Assistant Engineers at their Tylers Green laboratory near Beaconsfield, Bucks., to work on research and development projects. Starting salary £600/£900 per annum according to qualifications and experience. Five-day week. Superannuation scheme.—Apply to Secretary, T.D.A., 21, College Hill, London, E.C.4. [2390]

## ARCHITECTURAL APPOINTMENTS VACANT—cont.

**Q**UALIFIED Architectural Assistant required. — Write full particulars to T. Mitchell & Partners, 20, Bedford Square, W.C.1. [2398]

**A**RCHITECTS with London practice require Assistants with sound knowledge of construction. Large and small projects of wide variety.—Reply Box 1894, c/o A. & B. N. [2368]

**H**ARD stools but soft (?) jobs for Senior Assistants in humane Edinburgh office with very varied work. You can argue about your salary later if you are good — if you are bad don't waste time replying. Old Age Pension Scheme in force.—Box 2207, c/o A. & B. N. [2370]

**S**CHERRER & HICKS, 19 Cavendish Square, W.1. (Tel.: Museum 1105) require immediately a number of architectural assistants with imagination and initiative. The work is varied and covers Research Laboratories, Offices, Housing and Schools. Five-day week. Salary by arrangement. [2370]

**A**N important and responsible position is offered to technical representatives by a company marketing one of the building industry's most successful and well established products. Applicants must prove success in selling to Architects and public authorities, they must have integrity and energy and should be 30-40 years of age. The right applicants can earn salary and commission totalling up to £1,500-£2,000 p.a. including expenses. —Please write in detail to Box 2090, c/o A. & B. N. [2381]

**A**RCHITECTS' co-partnership require Assistant for working drawings and detailed design. Salary according to experience. Office doing work in U.K. and West Africa. — Write 44, Charlotte Street, London, W.1., or telephone Langham 5791. [0002]

**T**WO Senior Architectural Assistants. Varied practice, mainly schools. Salaries according to ability and experience.—Full details in writing please to R. A. Boxall, A.R.I.B.A., 81 Moulsham Street, Chelmsford. [2405]

**H**ACKNEY BOROUGH COUNCIL require Architectural Assistants and Junior Architectural Assistants for extensive programme of new housing, public baths, libraries and other public buildings. Appointments may be in Grades APT I (£530-£610), APT II (£595-£675) or APT III (£640-£765), singly or combined, plus London allowance of up to £30 p.a. Candidates must be Probationers or Students of R.I.B.A. Grade and commencing salary according to training, qualifications and experience. Application form obtainable from the Town Clerk, Town Hall, London, E.8, returnable by 18th June, 1956, quoting reference H.2. [2408]

**Q**UALIFIED Assistant required immediately.—Apply in writing, stating age, details of practical experience and when available to S. F. Jordan, A.R.I.B.A., M.S.I.A., Dip.T.P., 1 King's Road, Sloane Square, S.W.3. [2419]

## SITUATIONS VACANT

**A.M.I.Mech.E.** with some electrical and building constructional experience, or **A.M.I.C.E.** with mechanical and electrical experience, required for interesting position in the Middle East. Age preferably 30-35. Basic salary according to experience plus free furnished quarters and living allowance.—Apply with full details to Box 2209, c/o A. & B. N. [2396]

**S**HOPFITTING. A vacancy exists with exceptional prospects, excellent salary and pension scheme for young man with experience of Shopfitting practice and contract progressing.—Apply Peter Lord Ltd., Specialists in Clarks Shoes, 177, Piccadilly, London, W.1. [2403]

**ASSISTANT ENGINEER** required for suspended ceiling specialists. Sound knowledge of building construction desirable, with estimating experience and ability to control labour.—Write in confidence, giving details of career and present salary, to London Manager, Box 2228, c/o A. & B. N. [2400]

## SITUATIONS WANTED

**M**ANAGER, experienced, desires post. Demolition, excavations. No contract too large. Willing to travel; distance no object. — Box 1486, c/o A. & B. N. [2289]

**C**HARTERED Architect, resident in Midlands, but prepared to travel, desires to join a firm or undertaking where his professional experience and personal connections could be used to advantage on the commercial side of the building industry.—Address Box 2341, 582, Deacon's Advertising 36 Leadenhall Street, London, E.C.3. [2417]

## SITUATIONS WANTED—Contd.

**S**URVEYOR seeks appointment. Chartered Architect/Surveyor. Specifications, Schedules, etc. Control of contractors, advisory estimates, analysis prices, quantities, adjustment accounts. Experienced, educated, confident. — Box No. 2269, c/o A. & B. N. [2418]

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British McQuid Ltd. ....	—	Gliksten, J., & Co. Ltd. ....	—	Noelite Ltd. ....	—	Thorn Electrical Industries Ltd.	—
British Paints Co. ....	—	Grange-Cameron Iron Co. ....	—	Northarc Organisation, The	—	Thom, J., Ltd. ....	—
British Plaster Boards (Manu-	—	Gray, J. W., & Co. Ltd. ....	48	Norwich Union Ltd. ....	—	Thornton, William, & Sons Ltd.	—
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Group of Companies ....	—	Gummers Ltd. ....	—	—	—	Troughton & Young (Lighting)	—
British Titan Products Co. Ltd.	—	Hale & Hale Ltd. ....	—	Paramount Asphalt & Flooring	—	Ltd. ....	—
Brookhouse Steel Structures Ltd.	—	Hall, Harding, Ltd. ....	—	Co. ....	48	True Flue Ltd. ....	—
Bryce White & Co. Ltd. ....	—	Hall, J. & E., Ltd. ....	—	Parker, Winder & Achurch Ltd.	54	Tucker & Edgar ....	52
Burn Bros. (London) ....	—	Hall & Kay Ltd. ....	—	Parmer, Hope & Sugden Ltd. ....	—	Turner, Chas. & Son Ltd. ....	—
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Cement Marketing Co. Ltd. ....	25	Hewitt, F. & D. M., Ltd. ....	—	Pollard, E., & Co. Ltd. ....	—	Velux Co. Ltd. ....	54
Central Electricity Authority ....	—	Heywood, W. H., & Co. Ltd.	—	Portable Concrete Buildings Ltd.	50	Versatile Fittings Ltd. ....	2
Chase Products Engineering Ltd.	—	Hilger & Watts Ltd. ....	53	Potter, F. W., & Soar Ltd. ....	—	Vulcanite Ltd. ....	—
Chatwood-Milner Ltd. ....	—	Hill, Aldam, E., & Co. Ltd. ....	—	Protem Ltd. ....	—	—	—
Cheetham, A. J., Ltd. ....	56	Hills, F., & Son Ltd. ....	10	Protexax Ltd. ....	20	Ward, Thos. W., Ltd. ....	—
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Chilton Steel Ltd. ....	—	Holophane Ltd. ....	12	Rainham Timber Eng. Co. Ltd.	—	Cleaner Service Ltd. ....	54
Churchouse, C. M., Ltd. ....	—	Holophane Ltd. ....	—	Rapid Floor Co. Ltd. ....	—	Weatherfoil Heating System	—
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Cloughton Bros. Ltd. ....	—	Hotchkiss Engineers Ltd. ....	—	Reliable Plywood Co. Ltd. ....	—	Co. Ltd. ....	—
Clement Bros. Haslemere Ltd.	—	Hunter, Douglas Holland (Luxa-	—	Reynolds, H. L., Ltd. ....	—	Williams & Williams Ltd. ....	—
Clyde Structural Iron Co. Ltd.	—	flex) ....	—	R.I.W. Protective Products Co.	51	Wood, Edward, & Co. Ltd. ....	—
Colhurst Symons & Co. Ltd.	—	—	—	Ltd. ....	—	—	—
Compactum Ltd. ....	—	—	—	Richardson & Starling Ltd. ....	49	Yale & Towne Manufacturing	—
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Constat, Richard ....	—	—	—	Rubber Improvements Ltd. ....	—	The ....	—
Cox & Co. (Watford) Ltd. ....	—	—	—	—	—	Youngman, W. C., Ltd. ....	51
Cox, William J., Ltd. ....	—	—	—	—	—	—	—
Cozens Ventilators Ltd. ....	47	—	—	—	—	—	—
Crittall Manufacturing Co. Ltd.	—	—	—	—	—	—	—
Cullum, H. W., & Co. Ltd. ....	—	—	—	—	—	—	—

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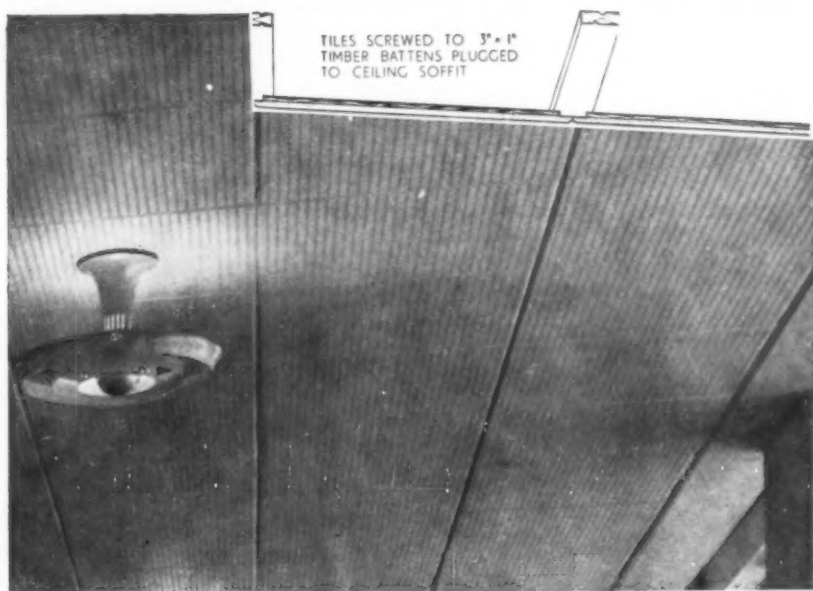
# SUPACoust

## PERFORATED ACOUSTIC TILE

"SUPACoust" tiles are manufactured from "Superplaster" (a fine Gypsum plaster admixed with "Superite" the plaster hardener).

"SUPACoust" tiles combine high sound absorption with all the advantages of the plaster panels.

- EXCELLENT ACOUSTICS
- BEAUTIFUL DECORATIVE FINISH
- SIMPLE FIXING
- HYGIENIC SURFACE
- NON-COMBUSTIBLE



Typical Installation of "Supacoust" Tiles

### Performance

Frequency (Cycles per second)	125	250	320	400	500	1000	2000	4000
SUPACoust TILE with glassfibre quilt backing fixed on timber battens	0.25	0.55	0.65	0.65	0.60	0.35	0.25	0.20
SUPACoust TILE with 1in wood wool backing	0.10	0.30	0.45	0.55	0.60	0.30	0.40	0.25
SUPACoust TILE fixed direct on plaster board	0.15	0.10	*	*	0.20	0.35	0.50	0.60
SUPACoust TILE left open at back	0.90	0.35	*	*	0.75	0.60	0.15	0.25

\* Not tested at this frequency.

### Sizes

Standards (supplied from stock) 24in x 24in x  $\frac{5}{8}$ in 24in x 12in x  $\frac{5}{8}$ in 30in x 15in x  $\frac{5}{8}$ in  
Other sizes to specification.

### Weight

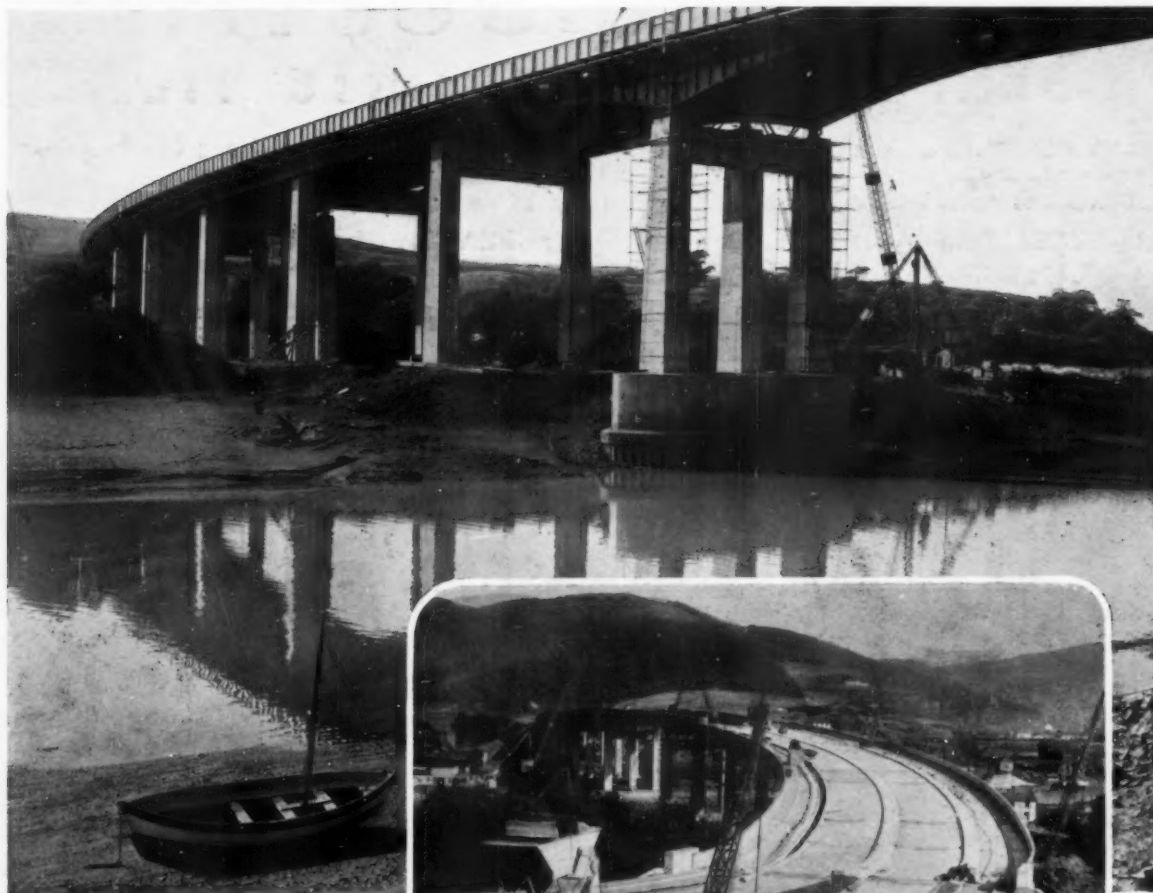
Standard Tiles: 2 $\frac{1}{2}$ lb per sq. ft.

If Vermiculite Plaster is used: 1 $\frac{1}{2}$  — 2lb per sq. ft.

"Supacoust" tiles can be fixed to any surface by screwing. It is normal to fix only at the corners so that support for the standard panels is required only at 2ft 0in centres of say, 3in x 1in timber battens. Quotations will be gladly given for either (a) Supply to the Site only, for fixing by the General Contractor, or (b) Supply and fixing as a Subcontract.

## PETRADENE LTD.

23-39 BENDON VALLEY, GARRATT LANE,  
LONDON, S.W.18 Tel. BATtersea 2497/8/9



NEW BRIDGE AT  
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Contractors :  
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# ABERTHAW

THE RELIABLE



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